BEYOND URNFIELDS

New Perspectives on Late Bronze Age – Early Iron Age Funerary Practices in Northwest Europe

Edited by
Helene Agerskov Rose, Lisbeth Christensen
and Arjan Louwen

BEYOND URNFIELDS

New Perspectives on Late Bronze Age – Early Iron Age Funerary Practices in Northwest Europe

https://doi.org/10.2369/9783869354439.beyond-urnfields

SCHRIFTEN DES MUSEUMS FÜR ARCHÄOLOGIE SCHLOSS GOTTORF

Ergänzungsreihe

Band 16

Herausgegeben vom Museum für Archäologie
durch Ralf Bleile
und dem Zentrum für Baltische und Skandinavische Archäologie
in der Stiftung Schleswig-Holsteinische Landesmuseen
Schloss Gottorf
durch Dieter Quast
in Kooperation mit dem Museum Sønderjylland – Archäologie
vertreten durch Lennart S. Madsen

https://doi.org/10.2369/9783869354439.beyond-urnfields

BEYOND URNFIELDS

New Perspectives on Late Bronze Age – Early Iron Age Funerary Practices in Northwest Europe

Edited by
Helene Agerskov Rose, Lisbeth Christensen and Arjan Louwen

Papers presented at the online session
'A community of ancestors: the urnfield phenomenon in northern Europe' at the 27th European Association of Archaeologists (EAA) Annual Meeting, Kiel 2021
and
the online symposium
'The URNFIELD tradition of the North',
Haderslev 2022

Ludwig

https://doi.org/10.2369/9783869354439.beyond-urnfields

Bibliographical data of the German National Library: The German National Library catalogues this publication in the German National Bibliography; detailed bibliographical information is available online under https://portal.dnb.de.

Bibliografische Information der Deutschen Nationalbibliothek: Die Deutsche Nationalbibliothek verzeichnet diese Publikation in der Deutschen Nationalbibliografie; detaillierte bibliografische Daten sind im Internet über https://portal.dnb.de abrufbar.

All rights reserved, including the reprint of extracts, in particular for duplication, the insertion into and processing in electronic systems and photomechanical reproduction and translation.

Copy-editing: Gundula Lidke, ZBSA, SSHLM, Schloss Gottorf, Schleswig
Layout, typesetting and image editing: Cornelia Lux-Kannenberg, SSHLM, Schloss Gottorf, Schleswig

2023 Centre for Baltic and Scandinavian Archaeology (ZBSA) in the Foundation of the Schleswig-Holstein State Museums (SSHLM), Schloss Gottorf, Schleswig, Germany.

Print and distribution:
© 2023 Verlag Ludwig
Holtenauer Straße 141
24118 Kiel
Tel.: 0431-85464
Fax: 0431-8058305
info@verlag-ludwig.de
www.verlag-ludwig.de

ISSN 2364-4689
ISBN 978-3-86935-443-9

Printed on acid-free and age-resistant paper
Printed in Germany

https://doi.org/10.2369/9783869354439.beyond-urnfields

Table of Contents

Ralf Bleile, Dieter Quast and Berit Valentin Eriksen
Preface 7

Lennart S. Madsen
Preface 9

Helene Agerskov Rose, Arjan Louwen and Lisbeth Christensen
Beyond urnfields – an introduction 11

Lisbeth Christensen
The Early Pre-Roman Iron Age urn grave tradition of southern Jutland 17

Scott Robert Dollar, Martin Egelund Poulsen and Lars Grundvad
Burial and settlement during the Early Pre-Roman Iron Age in south-central Jutland 33

Lene B. Frandsen
Billumvad urnfield and some other sites with circular ditches in the western part of Jutland 49

Sarah Skytte Qvistgaard and Bente Grundvad
Pre-Roman Iron Age cremations in Korsvanggaard, southwestern Denmark –
an urnfield with urn graves, cenotaphs and exhumations revealing *pars-pro-toto*
burial rituals. 59

Helene Agerskov Rose and Anna Egelund Poulsen
Revisiting Aarupgaard urnfield in southern Jutland, Denmark 81

Angelika Abegg-Wigg
Urn cemeteries from the Pre-Roman Iron Age and the Migration Period
in Schleswig-Holstein: An overview of the research history 93

Ingo Lütjens
Burials of the Pre-Roman Iron Age in Schleswig-Holstein. A short overview 105

Ringo Klooß
Short report on the excavation of the Early Iron Age burial site of Borgstedt
in the Rendsburg-Eckernförde district. 111

Stefanie Schaefer-Di Maida and Jutta Kneisel
The urnfield phenomenon in Schleswig-Holstein:
New insights into the chronology and hypotheses 117

Jochen Brandt
Pre-Roman Iron Age burials in the lower Elbe region 133

https://doi.org/10.2369/9783869354439.beyond-urnfields

Wenke Domscheit
Grave groups in Late Bronze and Early Iron Age grave fields –
the grave field of Pinnow as an example of a phenomenon 147

Robert Schumann
A tale of ancient mounds …
The re-use of old monuments for Iron Age burials in northern Germany 165

Claudia Pankau
The ceremonial wagon and its relationship with the Urnfield burial rite 183

Katarzyna Ślusarska
Between the Urnfield culture and the Nordic Bronze Age.
Man and environment in the Late Bronze Age on the southwestern Baltic coast 199

Karol Dzięgielewski
Urnfields in their own way:
The Late Bronze Age on the southern Baltic coast (middle and eastern Pomerania) 217

Arjan Louwen
A tale of people, places and broken pots. A long-term perspective on the emergence
of urnfields in the Lower-Rhine-Basin 235

Stijn Arnoldussen and Karen M. de Vries
Cups that cheered no more. Funerary rites in the urnfields of the northern Netherlands 253

Christophe Snoeck, Giacomo Capuzzo, Barbara Veselka, Kevin Salesse,
Ioannis Kontopoulos, Rica Annaert, Sarah Dalle, Marta Hlad, Charlotte Sabaux,
Amanda Sengeløv, Elisavet Stamataki, Mathieu Boudin, Eugene Warmenbol,
Martine Vercauteren and Guy De Mulder
Unravelling the mysteries hidden within the cremated human remains from Belgium –
The inter-disciplinary CRUMBEL project 271

https://doi.org/10.2369/9783869354439.beyond-urnfields

Preface

The present volume is the result of an international network project entitled 'URNFIELD – The urnfield phenomenon in Denmark and Northern Germany'. The network was initiated in 2021 by Helene Agerskov Rose (Centre for Baltic and Scandinavian Archaeology) shortly after the successful defence of her PhD-thesis on 'Bayesian chronological modelling of the Early Iron Age in Southern Jutland, Denmark'. It was financed by the Interreg Deutschland-Danmark program with funds from the European Regional Development Fund (Interreg program 5A).

The urn grave was the dominant form of burial in the early Iron Age about 2,500 years ago. The deceased person was cremated, and when the fire was extinguished, the burnt remains were collected and placed in an urn. The urn was then buried and a small mound of earth was erected over the grave. Large cemeteries with hundreds and in some cases up to thousands of such urn graves have been found in the German-Danish border region. Unfortunately, research into this funerary phenomenon has always been nationally focussed. German archaeologists have studied German material and Danish archaeologists have studied Danish material. Working as a Danish archaeologist in Germany, Helene Agerskov Rose had observed this discrepancy first-hand and realised the vast, unexploited research potential of the urnfields. The primary purpose of the URNFIELD network project thus was to overcome the national and linguistic barrier among researchers by presenting the first scientific overview in English of the urnfield funerary phenomenon.

The URNFIELD network group first convened in 2021 at the 27th European Association of Archaeologists (EAA) Annual Meeting in Kiel. Due to the COVID-19 pandemic this was carried out as a virtual conference that also included the online session 'A community of ancestors: the urnfield phenomenon in northern Europe' organised by Helene Agerskov Rose, Lisbeth Christensen, Niels Algreen Møller, Guy de Mulder, and Arjan Louwen. The session successfully explored the current state of research into the north and west European urnfield phenomenon in the first millennium BC. It attracted presenters from Sweden, Denmark, Germany, the Netherlands, and Belgium – and an interested audience from Europe and beyond.

Unfortunately, the COVID-19 pandemic persisted, and so the following symposium 'The URNFIELD tradition of the North' had to be rescheduled as yet another virtual event in Haderslev, 2022. However, Helene Agerskov Rose and her primary collaboration partners Lisbeth Christensen, Lilian Matthes and Anna Egelund Poulsen (all Museum Sønderjylland – Arkæologi) persevered as organisers and the successful online symposium attracted 45 conveners from Denmark, Germany, Poland, Norway, the Netherlands, and Belgium.

Perhaps this was after all the perfect start for an international network in the present virtual era because since then the scientific community has continued to meet regularly for online presentations and discussions related to urnfield research. Meanwhile, other (public outreach) activities of the network were especially aimed at the interested laypeople and included an archaeological excavation of the Uldahl urnfield in southern Jutland open to the public as well as a free heritage guide to urnfield sites in the German-Danish border region.

The present volume 'BEYOND URNFIELDS. New perspectives on Late Bronze Age – Early Iron Age funerary practices in northwest Europe' is the result of these manifold efforts aiming to

https://doi.org/10.2369/9783869354439.beyond-urnfields

shed light on the urnfield phenomenon from many different angles, and to place this important field of research in both a regional and a broader supraregional context. Most of the chapters originate from the initial EAA session in 2021 and the URNFIELD symposium in 2022. It numbers an impressive 19 chapters written by 38 authors from Denmark, Germany, Poland, the Netherlands, and Belgium, reviewed by the volume's editors in an open review process. It is the first presentation of the northwest European urnfield funerary phenomenon in English. It provides a comprehensive overview of the archaeological material, its research history and most importantly, an understanding of the nuances contained within the funerary practices, which is the foundation for future research into the urnfield phenomenon across national, regional, and disciplinary boundaries.

This volume successfully demonstrates that the urnfields of northwest Europe are not as anonymous as previously assumed and that they still hold valuable information about life and death in the Late Bronze Age and Early Iron Age.

Acknowledgements

On a final note, the series editors wish to thank all those involved during the different stages of the network project and ensuing publication. Most notably, we wish to direct our special thanks to lead partner Helene Agerskov Rose for initiating the URNFIELD network project on behalf of the Centre for Baltic and Scandinavian Archaeology.

We wish to thank all authors and contributors for their commitment to help ensure the timely publication of the present volume; especially, Helene Agerskov Rose, Lisbeth Christensen and Arjan Louwen for scientific editing, Gundula Lidke for technical proofreading and production support, Sharon Shellock for linguistic revision, Cornelia Lux-Kannenberg for layout and graphic design, and Jürgen Schüller for designing the project logo. We gratefully acknowledge the support of the Centre for Baltic and Scandinavian Archaeology, the Archaeological State Museum of Schleswig-Holstein, and Museum Sønderjylland – Arkæologi.

Last but not least, the financial support of the Interreg Deutschland-Danmark program with funds from the European Regional Development Fund (Interreg program 5A) is gratefully acknowledged.

Schleswig, September 2023

Ralf Bleile
Director
The Archaeological
State Museum of
Schleswig-Holstein

Dieter Quast
Director
Centre for Baltic and
Scandinavian Archaeology

Berit Valentin Eriksen
Scientific Director
Centre for Baltic and
Scandinavian Archaeology

https://doi.org/10.2369/9783869354439.beyond-urnfields

Preface

In the beginning of the 1970s, archaeologist Erik Jørgensen from Haderslev Museum (as it was called then) carried out an excavation of the very large urnfield of Aarupgaard west of Gram. This excavation of more than one thousand urns remains today one of the largest excavations ever carried out by the museum, and it has since then been a *desideratum* to make the archaeological evidence available for national and international researchers. Aarupgaard is the largest urnfield in the Danish area, but also other, smaller urnfields in southern Jutland ought to play a considerable role in Early Iron Age research carried out at the museum. The international research project URNFIELD initiated in 2021 was exactly the initiative which we have been waiting for.

Museum Sønderjylland – Arkæologi (formerly: Haderslev Museum) eagerly joined the ZBSA and Helene Agerskov Rose, the head of the research group, in her efforts to develop the research project. From Museum Sønderjylland the project group included Lilian Matthes and Lisbeth Christensen as well as Anna Egelund Poulsen who took on the large task of cataloguing the material evidence from the urnfield of Aarupgaaard.

Like so many other projects, URNFIELD was affected by Covid-19 shutdowns, but it was nevertheless possible to meet the aims of the research group. A brochure, a recent excavation open to the public, and not least a research symposium created the foundation for future national and international research collaborations. Museum Sønderjylland hopes that the national and international network created through the URNFIELD project will be strengthened further and that the URNFIELD network in the coming years will be able to provide the necessary resources and competences to develop a large-scale, international and multidisciplinary research project that can attract international research funding. Such a research project would naturally include the investigation of Aarupgaard urnfield and other urnfields in southern and western Jutland.

Haderslev, September 2023

Lennart S. Madsen
Head of Museum Sønderjylland – Arkæologi

https://doi.org/10.2369/9783869354439.beyond-urnfields

https://doi.org/10.2369/9783869354439.beyond-urnfields

Beyond urnfields – an introduction

Helene Agerskov Rose, Arjan Louwen and Lisbeth Christensen

Our cultural landscape contains traces of our past, some more visible than others, but they all tell stories of past human lives and experiences. Though widely distributed across the European continent, the urnfields of the Late Bronze Age and Early Iron Age are among the more unassuming physical legacies of the late prehistoric landscape (Fig. 1). The urnfield graves contain the remains of women, men and children from a period when cremation was the dominant funerary practice, leaving behind a very fragmented archaeological record. Coupled with a general lack of conspicuous burial goods this has left the funerary phenomenon somewhat underappreciated. Recent advances in archaeological theory, excavation methods and scientific methods are however making it increasingly clear how much there is still to gain from this inconspicuous funerary phenomenon.

Fig. 1. A lonely sheep grazing on top of an urnfield barrow at Birkelev Plantage, southern Jutland (photo: L. Christensen).

https://doi.org/10.2369/9783869354439.beyond-urnfields

The urnfield funerary phenomenon has a long research history in Schleswig-Holstein and Denmark (see Abegg-Wigg; Rose/Poulsen, this volume). It was clear from the beginning that the small and anonymous urnfield graves were part of the same phenomenon, but for mainly political reasons, research into these remained largely nationally focussed. The URNFIELD network project was established specifically to remedy this national divide and shed light on the similarities and differences of the urnfield funerary practices in the German-Danish border region. The urnfields are part of a larger European phenomenon and the project invited archaeologists and researchers from northwestern Europe to present and discuss what forms the urnfield funerary phenomenon took in their specific region. This edited volume is the result of these discussions and will hopefully form the foundation for future research into the urnfield phenomenon. The discussions considered the archaeological material, the research history and provided an understanding of the nuances contained within the funerary practices. The chronological frameworks differ across the study area and readers are referred to references within the respective chapters or recent overviews presented by Louwen (2021, fig. 3.9) and Sørensen/Rebay-Salisbury (2023, fig. 4.1).

A spectrum of terms is used for the wide variety of cremation graves presented in this volume, each in accordance with the respective research traditions. One re-occurring topic of discussion during the preparation of this volume was the term 'urnfield': What funerary practices and grave forms are included by this term and perhaps more importantly, what are not? In the present context the term only refers to a funerary phenomenon, without any chronological or cultural connotations (for a discussion of the research history of the 'urnfield' term we refer to Sørensen/Rebay 2008). Regardless, 'urnfield' remains an ambiguous term and we recommend that future studies consider the applicability of the so-called 'urnfield package' recently presented by Cavazzutti et al. (2022). They list a series of essential and selective traits related to the funerary ritual but recognise that adoption of the urnfield package is a dynamic and selective process at the local level, resulting in the adoption of some traits but exclusion of others. The essential criteria include the use of a container for the cremated remains, placement of the container in a pit, frequent reduction/exclusion of grave goods (particularly weapons) and a general tendency for the cemeteries to be largely representative of the once living population. Most of the wide variety of cremation graves presented in the present volume can be defined as urnfields following these criteria, but without a further set of criteria the definition is too broad to be very useful. The optional criteria include washing/selective collection of cremated remains from the funeral pyre, depositing the cremated remains in 'anatomical order' within the container and the presence of distinct burial groups at the cemeteries. These criteria are all discussed in this volume, but the criteria fail to recognise the distinct sub-categories of burials. We propose features relating to burial architecture, e.g. stone settings, stone circles, stone pavements, earthen mounds and circular ditches might be more useful for the purpose of identifying the distribution of specific funerary traditions and the possible meaning of these.

The urnfield funerary phenomenon

Reoccurring themes in this volume are specific elements of the funerary rites and possible interpretations hereof. One example is the circular ditches around the small barrows that occur in southern Denmark and occasionally in northern Germany and the Netherlands (see chapters in this volume: Abegg-Wigg; Arnoldussen/De Vries; Christensen; Dollar et al.; Frandsen; Louwen; Lütjens; Qvistgaard/Grundvad; Rose/Poulsen; Schaefer-Di Maida/Kneisel). The circular ditches can have several interruptions or entrances to the mound and the number of these are chronologically dependent – with the earliest graves having none and the later graves having more. Frandsen (this volume) proposes that the circular ditches on the one hand carry a magic and symbolic quality,

https://doi.org/10.2369/9783869354439.beyond-urnfields

forming a physical manifestation of the boundary between life and death, but on the other hand also carry a practical quality as grave markers. Domscheit (this volume) interprets above-ground grave markers such as circular ditches, stone pavings, stone circles and barrows etc. as mnemonic devices that help preserve collective memory over centuries, ensuring that the additions of later graves did not unintentionally destroy earlier monuments, but also retaining the clustering of graves into burial groups and sub-burial communities. Cultural or collective memory evidently played a vital role in the continued importance of specific burial sites over extended periods of time, as observed at Mang de Bargen that were used for approximately two millennia (Schaefer-Di Maida/Kneisel, this volume), or in the frequent re-use of ancient monuments as nuclei for new Iron Age burial sites (Schumann, this volume).

Several chapters demonstrate more complex funerary rites than previously anticipated and how commemoration of the dead can take many forms. Accessory vessels belong to a frequent find category in urnfield graves, and Arnoldussen/De Vries (this volume) suggest besides being personal belongings of the deceased they might be drinking cups used in rites of farewell or commemoration by the mourners. Exhuming graves might be interpreted as a more radical form of commemoration, or perhaps with the opposing purpose of deleting memories of a deceased. Qvistgaard/Grundvad (this volume) discuss possible explanations of such exhumation activities, including the positioning of *pars pro toto* offerings in the urns (e.g. pottery sherds, fragments of human remains and white stones), and suggest they might be linked to the recovery and curation of ancestor bones. The inclusion of possible ancestor bones in urn graves is demonstrated by Snoeck et al. (this volume) using recent advances in strontium isotope analysis and radiocarbon dating of cremated bone, underlining the multifaceted and complex urnfield funerary rites.

A European phenomenon with local roots?

The gradual transition from inhumation to cremation unfolding across the European continent during the Bronze Age (Harding 2000; Sørensen/Rebay-Salisbury 2023) remains a complex process to grasp archaeologically. This 'other' way of dealing with a dead body did not replace the practice of inhumation overnight and must have involved intense and constant (re)negotiations of local values and convictions (Sørensen/Rebay-Salisbury 2023), eventually resulting in the cemeteries we came to know as urnfields. However, in the past the discourse of how the 'urnfield package' spread across the continent almost literally placed our study area at the fringes of the phenomenon, pointing at central Europe as the place of origin (see historiography in Sørensen/Rebay-Salisbury 2023, 23–28), or even as far as the Mediterranean (Childe 1930; 1950; Kimmig 1964). Resemblances between cremation graves across the continent are striking, but as will appear from the various contributions to this volume, the urnfield phenomenon can only really be understood from a local perspective.

This point is evidenced by research carried out by Snoeck et al. (this volume). They extracted strontium isotopes from cremated remains from several early urnfields in Belgium, and the results indicate the buried individuals were local to the area. Though the 'missionary perspective' proposed by Childe (1930) has long since been abandoned, these new techniques finally reject this hypothesis scientifically. The same point can be observed in the contribution by Pankau (this volume), who investigates the widespread distribution of ceremonial wagon elements (bronzes) across Europe. Though the earliest examples are found in the Carpathian basin and southern central Europe where they feature in lavish elite graves, the more marginal finds from northern Europe are likely imports incorporated in hoards or indirectly evidenced in the form of rock art. These latter observations might on the one hand indicate how foreign and exotic objects were incorporated in local practices (cf. Fontijn/Fokkens 2007) but can on the other hand also indicate how certain local styles were being incorporated in practices that are shared over vast areas, as illustrated by the contributions of Lütjens,

https://doi.org/10.2369/9783869354439.beyond-urnfields

Klooss and Brandt (all this volume). Another perspective on the importance of local traditions and certain practices associated with urnfields stems from the contribution of Dzięgielewski (this volume). He points at the role transhumance might have played to local communities inhabiting Pomerania and how urnfields would have effectuated a sense of permanence in the landscape. This latter observation is not only relevant as it emphasises how different the motivations behind the widely shared urnfield funerary practices might have been, but also by introducing the form of land(scape) itself as an important and decisive factor.

Ancestral landscapes

For obvious reasons, urnfields cannot simply be studied as an isolated phenomenon if we want to understand the role of these cemeteries in the broader social and cultural landscape. Linking urnfields to contemporary settlements possibly used by the same populations (Dollar et al. this volume; Van Beek/Louwen 2012; 2013) and reconstructing the paleoenvironmental landscape of the urnfields (Ślusarska, this volume) are essential tools to this end. The urnfields were also linked to the past as testified by their proximity to other funerary monuments present in the landscape for centuries already (Louwen; Schumann; Ślusarska; Schaefer-Di Maida/Kneisel; Rose/Poulsen; Christensen, this volume). These practices not only show the awareness of the people that inhabited the land(scape) even long before them, but also indicate the active roles attributed to the (ancient) dead in the Late Bronze Age and Early Iron Age (Louwen 2021; this volume). The apparent importance of ancestors in socially binding these communities to the local landscape again emphasises that the emergence of urnfields in northwest Europe cannot be understood without considering the local traditions of these communities.

Beyond urnfields

We hope to remove the urnfields of northwest Europe from their previous obscurity and demonstrate their potential for unravelling the social fabric of the Late Bronze Age and Early Iron Age landscape in this part of the continent. The volume title 'Beyond Urnfields' was chosen to spark a discussion of what the 'urnfield' term exactly entails and whether it is still a viable construct in the study of Late Bronze Age-Early Iron Age funerary practices (cf. Sørensen/Rebay 2008). As the various contributions in this volume show, the 'urnfield package' (Cavazzutti et al. 2022) varies greatly in northwest Europe during the Late Bronze Age-Early Iron Age. We question the usefulness of viewing cremation grave cemeteries across Europe through the same cultural lens and instead start contextualising the funerary phenomenon *beyond urnfields*.

Although time has been hard on the small monuments dotting the northwest European landscape it is now possible to re-examine and ask new research questions of material from old excavations by applying new scientific methods, as demonstrated by Snoeck et al. (this volume) through the application of strontium isotope analysis and by improving existing methodologies in for example osteology. Recent advances in radiocarbon dating of cremated bone are also making it possible to test and revise chronological frameworks which have historically been based on typo-chronological studies of urnfield artefact assemblages (e.g. De Mulder et al. 2014; Rose/Meadows in review).

As editors, we are grateful to all the contributors to the volume and to everyone that took part in the productive scientific discussions at EAA 2021 and the URNFIELD symposium. We send special thanks to our colleagues at Landesmuseen Schleswig-Holstein, Zentrum für Baltische und Skandinavische Archäologie and Museum Sønderjylland: Without your support this volume would not have been possible.

https://doi.org/10.2369/9783869354439.beyond-urnfields

Bibliography

Cavazzutti et al. 2022: C. Cavazzuti/A. Arena/A. Cardarelli/M. Fritzl/M. Gavranović/T. Hajdu/V. Kiss/K. Köhler/G. Kulcsár/E. Melis/K. Rebay-Salisbury/G. Szabó/V. Szeverényi, The First 'Urnfields' in the Plains of the Danube and the Po. Journal of World Prehistory 35, 2022, 45–86.

Childe 1930: V. G. Childe, The Bronze Age (London 1930).

Childe 1950: V. G. Childe, Prehistoric Migrations in Europe (Oslo 1950).

De Mulder et al. 2014: G. De Mulder/G. Creemers/M. Van Strydonck, Challenging the Traditional Chronological Framework of Funerary Rituals in the Meuse-Demer-Scheldt Region: 14C Results from the Site of Lummen-Meldert (Belgium). Radiocarbon 56(2), 2014, 461–468.

Fontijn/Fokkens 2007: D. R. Fontijn/H. Fokkens, The emergence of Early Iron Age 'chieftains' graves' in the southern Netherlands: reconsidering transformations in burial and depositional practices. In: C. Haselgrove/R. Pope (eds.), The Earlier Iron Age in Britain and the Near Continent (Oxford 2007) 354–373.

Harding 2000: A. F. Harding, European Societies in the Bronze Age (Cambridge 2000).

Kimmig 1964: W. Kimmig, Seevölkerbewegung und Urnenfelderkultur. In: R. von Uslar/K. J. Narr (eds.), Studien aus Alt-Europa 1 (Bonn 1964) 220–283.

Louwen 2021: A. Louwen, Breaking and Making the Ancestors. Piecing together the urnfield mortuary process in the Lower-Rhine-Basin, ca. 1300–400 BC (Leiden 2021).

Rose/Meadows in review: H. A. Rose/J. Meadows, Dividing time – an absolute chronological study of material culture from Early Iron Age urnfields in Denmark. PLOS ONE (in review).

Sørensen/Rebay 2008: M. L. S. Sørensen/K. C. Rebay, The impact of 19th century ideas on the construction of 'urnfield' as a chronological and cultural concept. In: A. Lehoerff (ed.), Construire le temps. Histoire et méthodes des chronologies et calendriers de derniers millénaires avant notre ère en Europe occidentale. Actes du XXXe colloque international de Halma-Ipel, UMR 8164 (CNRS, Lille 3, MCC), 7–9 décembre 2006, Lille (Gluxen-Glenne 2008) 5767.

Sørensen/Rebay-Salisbury 2023: M. L. S. Sørensen/K. Rebay-Salisbury, Death and the Body in Bronze Age Europe (Cambridge 2023).

Van Beek/Louwen 2012: R. Van Beek/A. J. Louwen, Urnfields on the move: testing burial site-settlement relations in the eastern Netherlands (c. 1100 – 500 BC). In: Archäologisches Korrespondenzblatt 42, 2012, 41–60.

Van Beek/Louwen 2013: R. Van Beek/A. J. Louwen, The centrality of urnfields. Second thoughts on the structure and stability of Late Bronze Age and Early Iron Age cultural landscapes in the Low Countries. In: D. R. Fontijn/A. J. Louwen/S. A. van der Vaart/K. Wentink (eds.), Beyond Barrows. Current research on the structuration and perception of the prehistoric landscape through monuments (Leiden 2013) 81–112.

Helene Agerskov Rose
University of Gothenburg
Department of Historical Studies
Gothenburg
Sweden
helene.agerskov.rose@gu.se

Lisbeth Christensen
Museum Sønderjylland, Arkæologi Haderslev
Haderslev
Danmark
lich@msj.dk

Arjan Louwen
Leiden University
Faculty of Archaeology
Leiden
The Netherlands
a.j.louwen@arch.leidenuniv.nl

https://doi.org/10.2369/9783869354439.beyond-urnfields

https://doi.org/10.2369/9783869354439.beyond-urnfields

The Early Pre-Roman Iron Age urn grave tradition of southern Jutland

Lisbeth Christensen

Keywords: Urn grave fields, Pre-Roman Iron Age, burial rites

Abstract: The article presents the Iron Age urnfield tradition and the regional variations of burial practices within southern Jutland, with particular focus on the urnfield phenomenon. The regional differences and similarities concerning burial rituals and grave goods are exemplified using the large urnfields of Aarupgaard and Uldal. The different burial rites and their development during the Early Pre-Roman Iron Age are addressed. This includes a range of cremation grave types, e.g. urn graves with or without stone constructions, bone-layer graves, cremation pits and cenotaphs, besides secondary burials in primary mounds. Some of the burial rituals show continuation from the Late Bronze Age to the Early Pre-Roman Iron Age, but the urnfield graves represent a new form of burial monument in the Early Pre-Roman Iron Age.

Introduction

In the Early Pre-Roman Iron Age, different types of urn burials were in use in southern Jutland, demonstrating a regional variation in burial practices in relation to grave types, burial customs, types of artefacts and burial population. Urn burials can take the form of flat graves without demarcation or with demarcation in the form of stone cairns and stone circles. These can be covered by small mounds or hillocks, which are demarcated by a circular ditch: the so-called urnfield graves (Danish: *tuegrave*). Finally, secondary urn graves can be interred in existing grave mounds. Most of these burial rites occur together within the same regions and sometimes also at the same cemeteries, while the stone cairns are confined to southeast Jutland. The focus of this paper is the small urnfield graves occurring in the urnfield cemeteries (Danish: *tuegravpladser*). For this purpose, two of the largest known urnfields – Uldal and Aarupgaard – have been selected to form the basis for a broader discussion of the Iron Age Urnfield tradition, its development, burial rituals, grave goods and cremated remains.

The urnfield tradition was introduced to the Danish area around the transition from the Late Bronze Age to the Pre-Roman Iron Age. The mortuary process was part of a ritual and religious performance, in which religious practices may have included the commemoration or veneration of ancestors, sacrifices, feasts, dances, etc. The cremation fire itself was perhaps seen as a cleansing ritual or as the complete transformation of the body (Fahlander/Oestigaard 2008). Stages of the mortuary process included: 1) building the pyre, 2) cremating the deceased, 3) rigorously sorting the pyre-debris and collecting cremated remains and personal objects from the pyre, 4) placing cremated

https://doi.org/10.2369/9783869354439.beyond-urnfields

remains and grave goods in an urn or another (organic) container, 5) placing the urn or container in a funerary monument.

Presently, about 75 urnfields have been recorded within southern Jutland (Fig. 1; see Møller et al. 2020, 14). Many of the urnfields are small with less than 20 graves or middle-sized with up to 40 graves, but none of these have been fully excavated. Other sites have never been excavated at all, as they have been protected under Danish Heritage regulations since the 1930s. These urnfields are still visible today in heathland areas or in woods. The urnfields have historically attracted a special status and have come to characterise the Pre-Roman Iron Age (Becker 1961, 161–170), but today it seems more appropriate to understand this burial form as one among several contemporaneous funerary rites.

The chronology in this article is based on the relative chronological scheme developed by C. K. Jensen, who divides the Pre-Roman Iron Age into two main phases: an early and a late one (Jensen 2005). Some German scholars have included southern Jutland in the area of the Jastorf culture, based on common traits in burial customs and dress accessories (Bräuning 2014, 81–91), whereas Danish scholars regard southern Jutland as a separate group at its periphery, but with strong impulses from the German Iron Age culture (Becker 1961, 268).

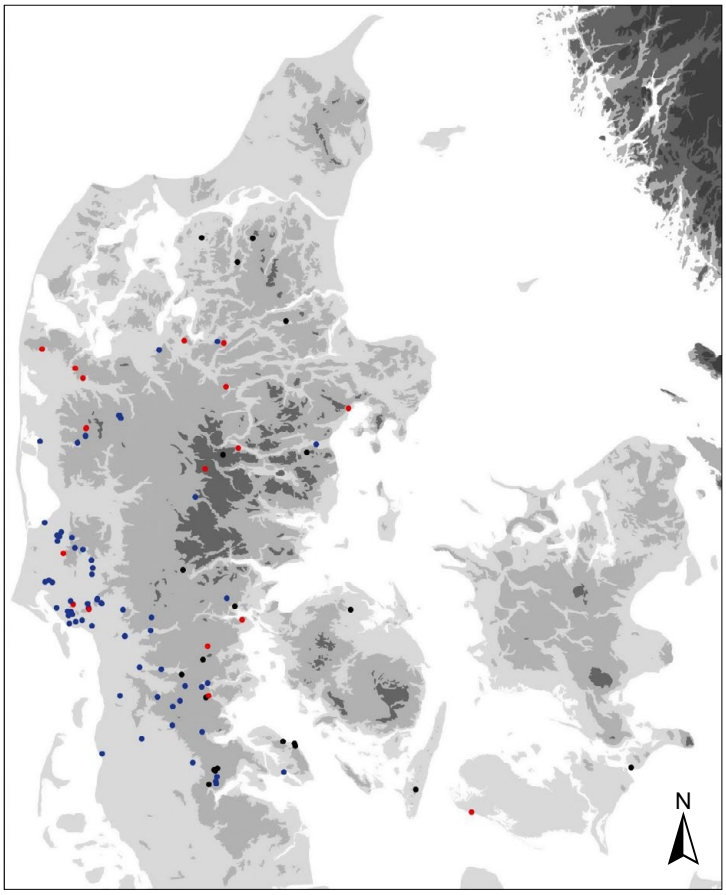


Fig. 1. The distribution of known urnfields in Denmark. Blue – urnfields with mounds and circular ditches; red – possible urnfields; black – related sites with stone cairns and stone circles (after Møller et al. 2020, 14).

Aarupgaard urnfield

The site of Aarupgaard is situated about 10 km southeast of Ribe, at the top of a south-facing slope between the Fladså and Gelså streams. Aarupgaard has been known since the early 1890s, but the first excavations were not undertaken until 1947 by H. Neumann. An area of about 72 x 72 m of un-

https://doi.org/10.2369/9783869354439.beyond-urnfields

cultivated heathland at the site has been protected by Danish Heritage regulations since 1931. Erik Jørgensen from the Museum in Haderslev excavated the urnfield during three campaigns from 1970–1972. Three founding graves from the Late Bronze Age or Early Iron Age were found as secondary urn graves in a Bronze Age mound in the northernmost part of the site. Altogether, about 1,200 burials were excavated within a cultivated area of 60,000 m² and a small area of heathland (Fig. 2). Another 300 monuments remain unexcavated in the protected area. The preservation of the burial monuments and individual graves varies throughout the site. The typo-chronological dating shows that the site was used as a burial ground for three to four centuries, from about 500 to 150–100 BC.

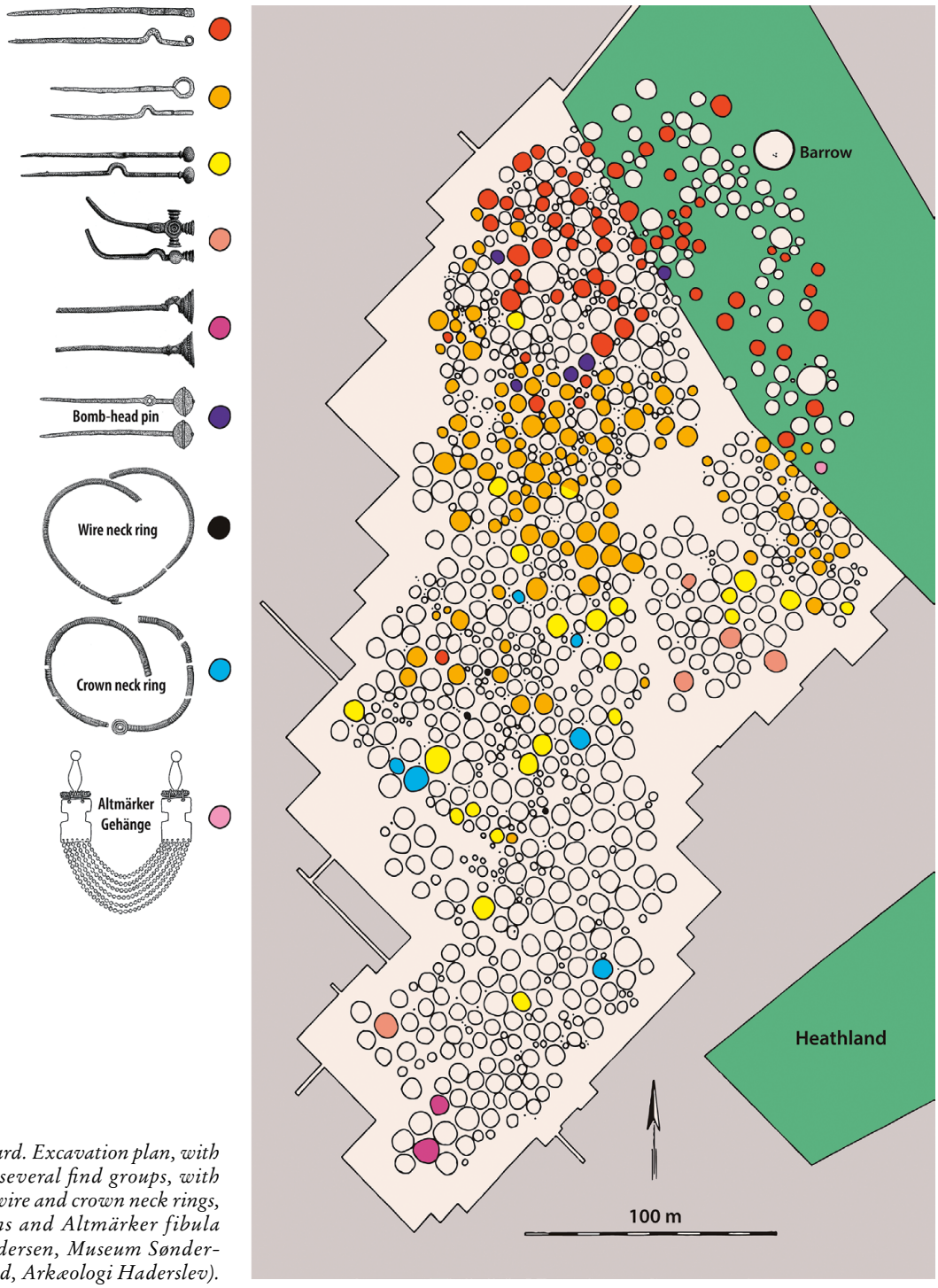


Fig. 2. Aarupgaard. Excavation plan, with distribution of several find groups, with the addition of wire and crown neck rings, bomb-head pins and Altmärker fibula (graphics J. Andersen, Museum Sønderjylland, Arkæologi Haderslev).

https://doi.org/10.2369/9783869354439.beyond-urnfields

Uldal urnfield

The site of Uldal is situated 18 km west of Haderslev on a small, sandy ridge surrounded by small bogs, close to the Valsbæk stream. Uldal has been known since 1871–1880, when a local veterinarian undertook some small excavations. Further excavations were performed in the 1930s and 1940s, some of them prior to the construction of roads. Erik Jørgensen also excavated this urnfield during several campaigns from 1995–2003. Most recently, in 2021, Museum Sønderjylland performed a minor excavation as part of the URNFIELD network project. The excavation revealed that the urnfield is larger than previously assumed, although the total extent still remains unknown. The urnfield was founded in connection with a row of large Bronze Age burial mounds, probably six in total, although not all are preserved to this day. The horizontal stratigraphy of the urnfield suggests that a large burial mound was situated at the centre of the site, where a gravel pit can be found today. Two of the burial mounds were excavated in 1871 and 1898, respectively. They contained male and female graves from periods II–III of the Early Bronze Age. One of the mounds also contained a secondary urn grave with a glass bead from the beginning of the Pre-Roman Iron Age (Aner/Kersten 1984, 81–82 Taf. 39–40). Excavations of the urnfield have revealed about 420 graves, but at least 550 graves remain within a cultivated area of 15,000 m^2 (Fig. 3). The typo-chronological dating shows that the site was used as a burial ground for three to four centuries, from about 500 to 150–100 BC.

Many of the urns from the excavations during the 1930s and 1940s were well preserved. Several stone structures were also found in connection with the circular ditches during the earlier excavations. Some of the graves do not, however, show evidence of any circular ditches in the documentation, as the archaeologists of this time were only interested in the urn and were not aware of the existence of these ditches. Most of the vessels from the excavations during the 1990s and onwards are poorly preserved and lack their upper part. These graves had been disturbed by the plough, but in some cases the urn had already been removed during the excavations in the 19th and early 20th century. Many years of agriculture have destroyed the remaining stone structures and levelled out the small hillocks covering the urnfield graves, thus only poorly-preserved urn graves and traces of circular ditches remain today.

The Urnfield burial tradition

The following description of the urnfield burial tradition relies on archival records of excavations at Aarupgaard and Uldal urnfields. None of the sites has yet been fully published, although the material from Aarupgaard has been used in research (Jørgensen 1971a; b, 1972; 1975; Jensen 2005; Terkildsen 2005; 2015; Rose 2020), and Uldal has been mentioned in short papers (Jørgensen 2006; Jørgensen/Lewring 1999). There is no information about the location of the pyres, as there are no traces of pyre sites within the cemeteries of southern Jutland.

Categories of cremation burials are:

1) Urn graves: cremated remains only, buried in a funerary urn;
2) Bone-layer graves: concentration of sorted cremated remains. Probably buried in perishable containers of organic materials such as textile, leather or wood;
3) Urn/bone-layer graves: urn graves surrounded by cremated remains and pyre-debris;
4) Burned bones accompanied by a selection of sherds;
5) Cremation pits: mixed deposition of cremated remains, pyre-debris and pottery sherds in a small pit;
6) Cenotaphs: empty graves without grave goods or bones, might contain a vessel without burned bones.

https://doi.org/10.2369/9783869354439.beyond-urnfields

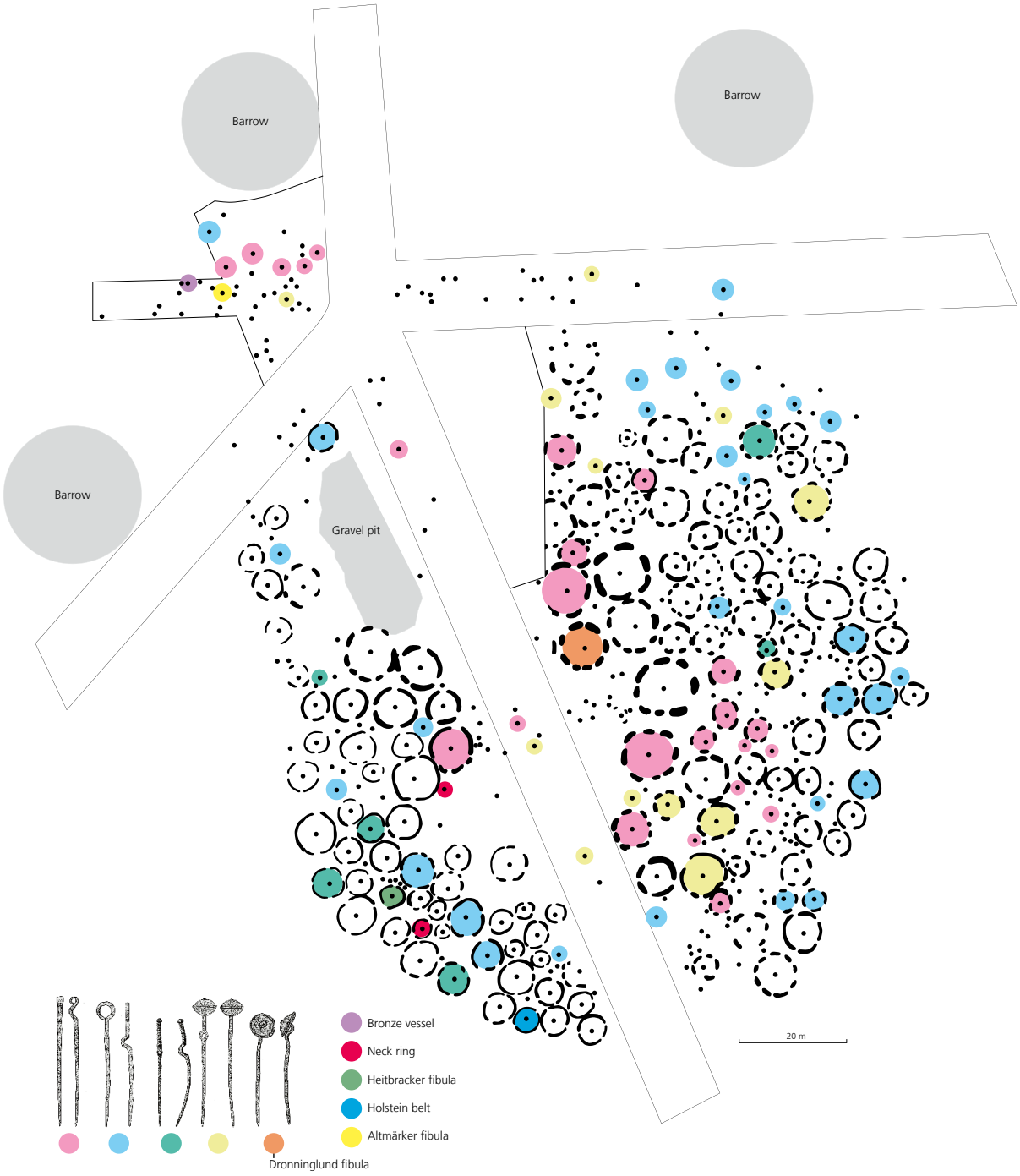


Fig. 3. Uldal. Excavation plan, with distribution of several find groups (graphics J. Andersen, Museum Sønderjylland, Arkæologi Haderslev).

It can sometimes be difficult to attribute some of the burials to a specific category because of poorly-preserved graves in cultivated areas. Some of the graves categorised as cenotaphs may be the result of bad preservation or from a later retrieval of buried bones, as has been observed at Søhale urnfield (Møller et al. 2020). Burials in urns represent the most common burial rite at both Aarupgaard and Uldal, but other basic burial forms are also found at both urn cemeteries. Normally, there is only one urn interred in each mound, but at Aarupgaard two central graves contained two urns each. The absence of a central urn grave in a burial monument may be because the urn was destroyed by ploughing.

https://doi.org/10.2369/9783869354439.beyond-urnfields

There are differences in the sizes of both urns and burial monuments, which depend, at least partly, on the age of the deceased. The preliminary anthropological analyses of the cremated bones from Aarupgaard show children's graves placed outside the circular ditches. Children are buried in mounds with a diameter of up to 3 m, whereas adults are buried in mounds with a diameter of more than 4 m. The urn can be placed in the mound filling, on top of the old surface or in a shallow pit at the centre of a mound. This burial custom seems to belong to the Early Pre-Roman Iron Age, while grave pits dug deeper into the subsoil seem to be a later custom. At the urnfields, urns are also found in shallow pits outside the circular ditches. These urn graves are situated in between the burial monuments and without a mound. Urn graves with stone pavings are found at both Uldal and Aarupgaard urnfields. Only 2 % of the urns from Aarupgaard have stone settings, but the use of stone packing in the burial pits is prevalent at Uldal. The urn may be totally covered by a stone construction or only supported by a few stones. The urns are either placed on a layer of small stones or a flat standing stone. Some urns have a capstone placed on top of them as a lid, which is often the case at Uldal. These stone settings are found throughout the urnfields. However, the different types of stone constructions still have to be analysed, classified and dated.

The use of stone settings is most frequently found in urn graves, but they are also present in urn/bone-layer graves and cenotaphs. At Uldal 96 % of the graves are urn graves; the remainder are bone-layer graves in stone settings, cremation pits and cenotaphs. Cenotaphs, bone-layer graves and cremation pits are distributed at the periphery of the urnfield and seem to date to the Late Pre-Roman Iron Age or period I.2b–II.1a. There is no overview of the exact number of cenotaphs and urn/bone-layer pits at Aarupgaard.

The urnfield grave

An urnfield grave is an urn grave but with added characteristics – it is a centrally placed grave within a small earth mound, surrounded by a circular ditch (Becker 1961, 161–170; Fig. 4). This definition is, however, no longer sufficient because urn graves with a circular ditch but without a mound also occur, as do circular ditches with other grave constructions, such as stone cairns.

Many of the graves in both Aarupgaard and Uldal are urn graves surrounded by circular ditches. The majority of monuments with circular ditches at both urnfields have a circular or oval shape. The circular ditches have a diameter of between 1–11 m. The ditches are 30–50 cm wide and dug 50–60 cm into the subsoil with a U-shaped cross-section. At Aarupgaard, nine mounds were demarcated by a stone circle within the circular ditch. A further twenty graves showed traces of a row of posts on the inside of the circular ditches as a demarcation of the mound. The pointed poles were dug 1 m into the ground and had a diameter of *c.* 10 cm. They were placed 30–40 cm apart, amounting to 50–60 poles per mound. Stone circles and post settings are never found together in the same mound, and they have only been detected in the well-preserved heathland part of Aarupgaard. The circular ditches often have more interruptions, allowing entrance to the interior of the grave. The depths of the ditches vary considerably, making it difficult to ascertain the number of interruptions in less well-preserved monuments. The circular ditches at Uldal have two to nine openings, while at Aarupgaard they have no or up to seven openings, measuring up to 50–80 cm in width. In the northern part of Aarupgaard, the number of interruptions varies from two to seven, while most monuments in the southern part have only two opposing interruptions. There appears to be a link between the number of interruptions and the size of the mound, with the largest and oldest mounds having more ditch interruptions than the small ones. Most of the circular ditches do not overlap, and the interruptions of adjacent monuments are sometimes oriented towards each other. Both small and large circular ditches are placed side by side, and fill layers show that the ditches were open in the Early Iron Age.

https://doi.org/10.2369/9783869354439.beyond-urnfields

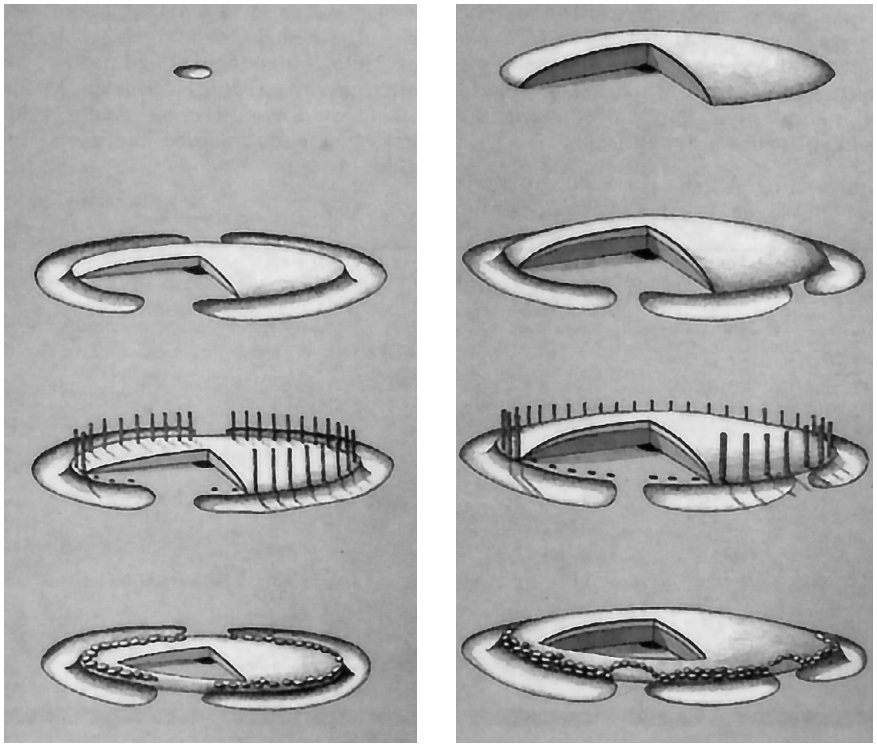


Fig. 4. The urnfield grave. Elements of construction: urn, barrow, circular ditch with or without poles and stone constructions (after Jørgensen *1975, 9).*

Urnfield graves were once covered by a small mound, although not all were surrounded by circular ditches. The mounds were built partly with soil from the circular ditch and partly with additional soil. The mounds range in size from 1–11 m in diameter and 0.3–0.4 m in height. The majority of mounds only contained a single urn grave, but a few mounds contained more urns, and one mound from Aarupgaard contained no less than five small urns. Two of these graves have been osteologically identified as children's graves, whereas the interpretation of the remaining three graves as children's graves is based on the limited amounts of cremated human remains (up to 125 g). Such grave clusters do, however, deviate from the general picture. At Uldal urnfield, there are examples of graves having stone cairns on top and being surrounded by circular ditches. The cairns are built of one to three layers of stone with an outer row of kerbstones; they measure up to 0.5 m in height and 1–3 m in diameter (Fig. 5). It is unclear if the stone constructions were once covered by an earth mound. The cairns are confined to southeast Jutland, whereas the earthen mounds are characteristic of southwest Jutland. The difference might be caused by differences in the geology of southern Jutland, where there is an abundance of stones in the eastern part of the peninsula, but only sandy soil in the western part. The stone cairns at Uldal resemble the grave stone constructions from the urn cemeteries at Bæk, Ustrup and Hinderup in southeast Jutland (Becker 1961, 185–186; Fig. 6). Here, the circular stone constructions have diameters of 0.6–4.5 m, but are without circular ditches, and they were probably never covered by mounds.

Grave content

The grave content is comprised of cremated human remains, occasionally pyre remains or other archaeobotanical remains and then the grave assemblage consisting of a combination of pottery and

https://doi.org/10.2369/9783869354439.beyond-urnfields

Fig. 5. Uldal, excavation in 1944. Urn grave with cairn and circular stone setting (photo Museum Sønderjylland, Arkæologi Haderslev).

Fig. 6. Ustrup, excavation in 1949. Circular stone settings (photo Museum Sønderjylland, Arkæologi Haderslev).

metal artefacts. Grave goods are here interpreted as any secondary vessels besides the funerary urn and all other artefacts included in the grave.

https://doi.org/10.2369/9783869354439.beyond-urnfields

Funerary urns

There are indications for prior use of many urns as cooking vessels in the household, such as use-wear on their surfaces or crusted charred food remains inside the vessels. Some vessels may however have been made specifically with the purpose of being funerary urns, as is indicated by the presence of finely burnished and ornamented urns. Only few vessels are decorated with horizontal bands on the upper part of the body. Typical motifs are horizontal zones of geometrical patterns of incised triangles, herringbone patterns, crescent-shaped ornaments, straight lines and finger imprints forming triangles. Some vessels have handles, a small knob, or even just an imitation handle, but the majority of the urns from Uldal and Aarupgaard had none of these. A few of the well-preserved urns from Uldal that originally must have had two handles were buried without the handles (Becker 1961, 183). There are urns with missing rims or handles from Uldal and Aarupgaard, but this is likely a question of preservation or an indication that storage vessels were re-used as funerary urns, rather than signs of deliberate destruction as has been proposed for other Danish and German urnfields (Møller et al. 2020, 57–58).

Grave goods

The grave good assemblages consist of a narrow range of artefact types, and only 30 % of the burials from Aarupgaard and 40 % from Uldal were furnished with secondary vessels or other artefacts. A small subset of the urn graves at Aarupgaard were covered with a lid (8 %), in the form of either a stone slab, another vessel placed upside down on top of the urn, or a ceramic lid. A few graves at Uldal did have vessel sherds placed on top of the urn. Several graves at Aarupgaard and Uldal contained a secondary vessel, which could be placed inside the urn on top of the cremated bones, in the pit beside the urn, or within the circular ditches. Graves with accessory vessels probably date to the later part of the Pre-Roman Iron Age, from period I.2b and onwards. Nine percent of the secondary vessels from Aarupgaard were small, miniature vessels that fit within the urns. Three of these have exceptional shapes, such as that of a small bird or a crescent. The larger secondary vessels from the urn pits or the circular ditches are vase-like vessels with a single band-like handle. An urn grave may contain up to two accessory vessels, plus another two vessels in the circular ditches. The large vase-like vessels with a handle do, however, occur either in the circular ditch or in the urn grave, but not in both ditch and grave in the same burial monument. Some of the vessels in the circular ditches might have been deliberately demolished, although destruction through agricultural activity cannot be ruled out.

Children's graves are often more poorly furnished than those of adult individuals, and more than 50 % of the metal objects from Aarupgaard are found in graves with larger mounds. Some dress accessories accompanied the deceased on the pyre, while others were added after cremation, such as in Aarupgaard U1203, which contained six unburned amber beads. The grave goods consist of jewellery, dress accessories and toiletry equipment, such as tweezers. No tools or weapons have been found. Dress pins and belt fittings made of iron and, more rarely, bronze are the most common types of grave goods. Dress pins often occur in pairs in the early phase of the cemeteries but singly in the late phase, reflecting changes in the typo-chronology (Jensen 2005). Similarly, a change from coil-head pins and ring-head pins to pins with a grooved head, winged-head pins and Holstein pins can be observed. Among the belt equipment, eyelet rings of bronze are succeeded by various types of iron belt hooks and iron rings with shank. Recently, a large number of graves from Aarupgaard have been ^{14}C-dated and the results confirm the established typological sequence of metal artefacts, although it is suggested that the pottery sequence needs some adjustment (Rose 2020).

The majority of artefact types are gender neutral, but excluded from this are bronze neck rings dating to the period I.2b–II.1a, which are associated with female individuals and children (Hingst 1976, 182). Neck rings have been found in two graves at Uldal and in ten graves at Aarupgaard (Fig. 7). The neck rings from Uldal are wire neck rings, one of which was found together with the cremated bones of a four-year-old child. One of the neck rings from Aarupgaard is a typologically early type, made of

https://doi.org/10.2369/9783869354439.beyond-urnfields

a flat bronze ribbon with small circular punctures or stamps. Three of the others are wire neck rings and probably belong to children's graves. The last six specimens are typologically early crown neck rings of which four were found in combination with a belt hook; three of these are tongue-shaped belt hooks. Crown neck rings are associated with women's graves (Konstantin-Hansen 2013, 23) and often occur singly in bog offerings. They are primarily found in Jutland and north Germany (Brandt 2001, 95–100), where they are also assumed to have been produced (Konstantin-Hansen 2013, 19–26). The most elaborately furnished graves are associated with women and are interpreted as expressions of status and identity, or even of symbolic significance related to the religion and ritual life of the society. One urn grave, grave U3847 in Aarupgaard, contained two fibulas belonging to a local variant of an *Altmärker Gehänge* (Keiling 1971). Three of the urn graves at Uldal also contained special fibulas – grave A182 contained an Altmärker fibula, grave A250 contained a Dronning-

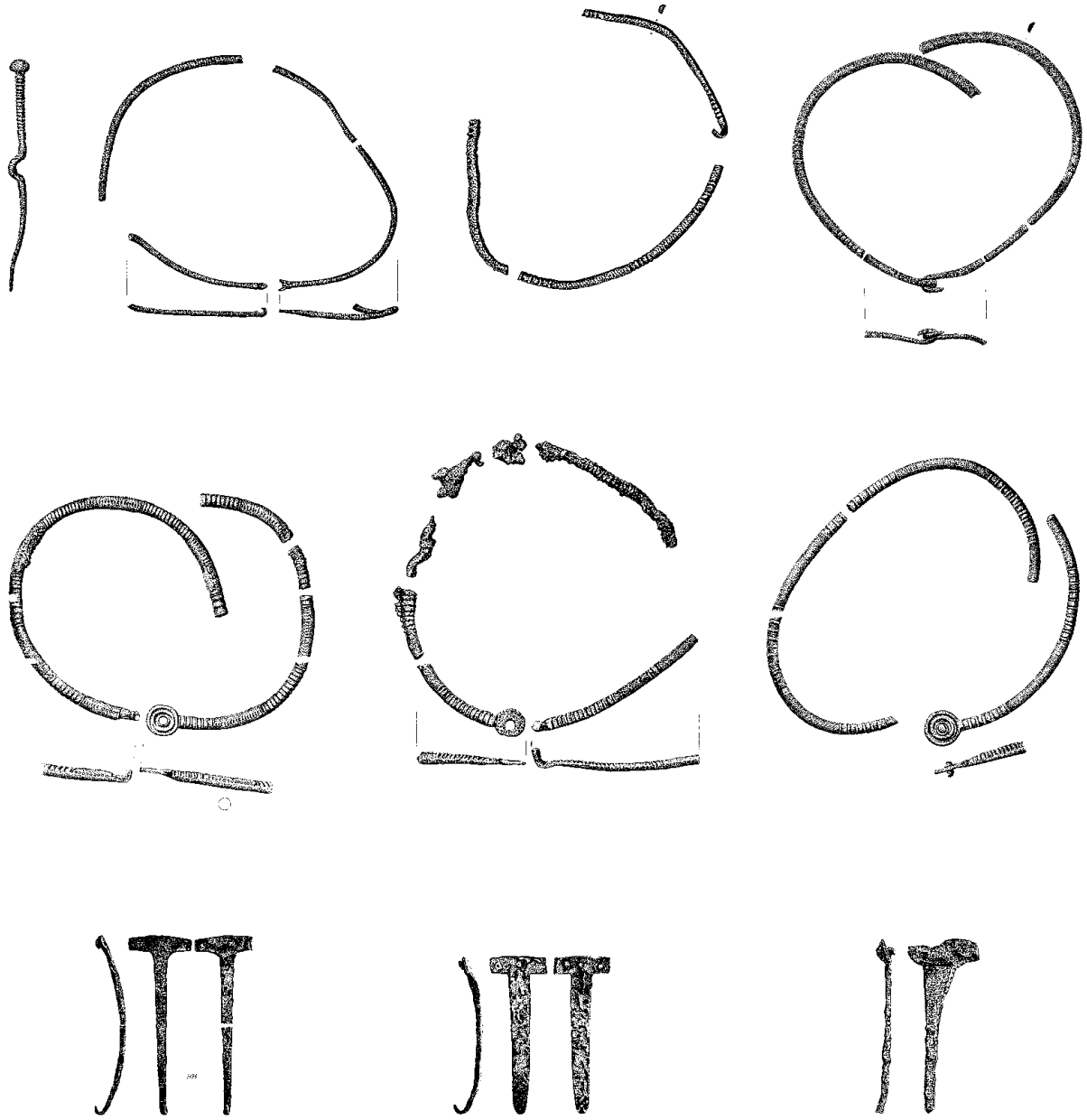


Fig. 7. Aarupgaard. Wire neck rings and crown neck rings combined with tongue-shaped belt hooks (drawings E. Jørgensen, Museum Sønderjylland, Arkæologi Haderslev).

https://doi.org/10.2369/9783869354439.beyond-urnfields

lund fibula (Becker 1959; Johansen 1990), and grave A206 contained two plate fibulas resembling a Heitbracker fibula (Hofmann 2014). A fourth, probable female, urn grave at Uldal, grave A196, contained the fragments of a belt sheet fastened by hook ends, of a so-called Holstein belt of type D2 from phase II.1b/II.2a (Hingst 1962, 69–90). It has been suggested that the deceased might have been a priestess (Hucke 1962; Keiling 1977).

Cremated human remains

No cremated bones from Uldal have been osteologically analysed. In total, 188 graves in the cemetery of Aarupgaard have been studied. Of these graves, 130 were analysed by Jørgen Balslev Jørgensen in the 1970s and 58 graves by Lise Harvig in 2019. This paper focuses on the more recent osteological analyses that were carried out according to modern standards and which considered the degree of bone fragmentation and pyre temperatures.

For the majority of graves, it was noted that the cremation pyres must have reached minimum temperatures of around 700–800 °C. Lower temperatures are more common for children's graves, and only six of the 20 children's pyres analysed from the cremation remains will have reached temperatures of 800 °C or above. This demonstrates that the cremation pyres were well constructed, with sufficient oxygen and lasted long enough for them to reach such high temperatures. The different skeletal regions were present in the expected ratios in the graves, which suggests that whole bodies are represented and no selections of specific body parts were carried out for the final interment. No evidence of deliberate partial selection or crushing of cremated remains from the pyre-debris was found.

The osteological investigation reveals that men, women and children of all age groups are represented in the material, but there is a remarkably high proportion of graves containing children. Twenty out of the 58 graves (34 %) were children's graves, and possibly adding to this number are four graves with an older child or young adult, and possibly another 12 graves with adult or almost adult individuals. The youngest individual was a neonate, while the oldest one was an adult male of around 25–50 years of age at the time of death. It is often difficult to determine the sex of cremated bones that have shrunken and deformed during the burning process, but here it was possible to determine the sex of eight out of the 38 adult individuals (five males, three females). The slightly higher number of males might be explained by differential preservation between the sexes, because males have a more robust bone structure (Harvig 2019).

The average weight of cremated human remains in a grave can be used as an indicator of the representativeness of cremated remains (Gonçalves et al. 2015, 75, 77). At Aarupgaard, remains of adult individuals weigh 702–2,000 g, with a mean of 1,051 g, whereas those found in children's graves are smaller overall, containing 50–920 g cremated bone, with a mean of 244 g (Table 1). Weather conditions, taphonomic processes, as well as post-excavation and excavation handling of the cremated remains, can have influenced the weights of the cremated bones. Preliminary analyses by the excavator, Erik Jørgensen, indicate a correlation between the amount of cremated bones and the size of the urn. The size of the urns varied according to the age of the deceased, so that the cremated remains of children were placed in small urns and those of adults in larger vessels. The children were often interred in small urns (<20 cm in height), while adults were interred in large urns (>30 cm in height; Fig. 8). At present, it is not possible to tell if specific types of urns can be related to either the sex

Table 1. Aarupgaard. Average measurements and weights of cremated bones of children and adults from the preserved bone material.

	Maximum fragment size (cm)	Weight (g)	Volume (ml)	Fragmentation index (g/ml)
Children (n = 20)	3.8	244	355	0.88
Adults (n = 38)	7.4	1,051	1,707	0.77

https://doi.org/10.2369/9783869354439.beyond-urnfields

or age of the deceased. In general, the urns only contain the cremated remains of a single individual and no animal bones. Based on the limited osteological investigation, it is concluded that the entire population is represented in the cremated remains and that the cremation practice was standardised, with fixed stages in the mortuary process.

The structure of the urnfields and connections to the ancestors

The urnfield at Aarupgaard relates to a large Stone or Bronze Age barrow north of the urn graves, and it stretches out to the south in two contemporaneous, separate main burial groups. Based on horizontal stratigraphy, a significant number of the graves date to period II.1, and the urnfield may have been in use throughout the second century BC (Terkildsen 2015, 57–58). The typo-chronology of the site suggests a gradual development from the north to the south. The monuments are closely spaced, causing a few circular ditches to intercut and, in some instances, the interruptions of the circular ditches around later monuments are orientated towards the interruptions of earlier ones. In grave U2236, which was analysed in the 1970s, a small child and an adult were placed together in the same urn, which suggests a close relationship. The results of the preliminary anthropological report from 2019, as well as the distribution of smaller vessels with small amounts of cremated bones, indicate that children's graves are found scattered across the cemetery of Aarupgaard. Children are generally interred either outside burial monuments or close to adult graves with large circular ditches, suggesting that it was important to be buried close to one's family and ancestors.

Fig. 8. Aarupgaard. Vessel types (photo L. Christensen, Museum Sønderjylland, Arkæologi Haderslev).

https://doi.org/10.2369/9783869354439.beyond-urnfields

The Uldal urnfield relates to three larger Bronze Age barrows to the north and extends south of these. Another barrow was probably placed in the centre of the urnfield but it is not preserved today. The urnfield has been in use from period I.1 until period II.1b/II.2a. The monuments are again closely spaced. Based on typo-chronology, it can be observed that earlier and later graves are placed in close proximity and that intercutting of circular ditches occurs. There seems to be a simultaneous development of separate burial groups that eventually merge into one large entity – one central burial group and one or more north of this. Each group is organised by a separate horizontal stratigraphy.

A few undated cooking pits have been identified in the northeastern part of Uldal, indicating that feasting may have taken place in connection with the burials. Broken pottery in the circular ditches at Aarupgaard may indicate smaller feasting ceremonies linked to some of the later burial monuments or ceremonies held in honour of, or in commemoration of, the ancestors. The connections between the monuments at the urnfields of Aarupgaard and Uldal suggests that ancestral and family connections played an important role. The two urnfields were established at approximately the same time and all members of some local communities were likely buried here.

Cultural connections

The burial customs observed at Aarupgaard and Uldal largely correspond to what has been observed at other urnfields in western and southern Jutland, e.g. at Aarre, Søhale and Veldbæk (Becker 1961, 128–196; Lorange 2015; Møller et al. 2020). In the Danish area, flat graves with comparable stone structures but without circular ditches or mounds are known at Bæk, Ustrup and Hinderup, again demonstrating a connection to the circular stone settings of Holstein. The Dronninglund fibula from Uldal indicates connections to northern Jutland, but both grave goods and burial monuments also suggest cultural connections between southern Jutland and northern Germany during the Early Pre-Roman Iron Age. Certain dress accessories, such as the Altmärker fibulas, the Heitbracker-like fibulas, the Holstein pins and the Holstein belt, show cultural affiliation to northern Germany and the Jastorf culture. A few of the bomb-head pins from southern Jutland show local traits as the upper part of the needle shaft is extended and perforated by a single hole. Bomb-head pins are, however, also known from Schleswig-Holstein, and some vessel shapes and decorations show connections to north Friesland (Lütjens 1996, 76). Examples of stone structures such as those at Uldal are found at the urn cemeteries in Groß Timmendorf/Timmendorfer Strand (Hingst 1989), Ruser Steinbusch (Hucke 1972) and Malente-Kreuzfeld (Hingst 1986), which are all situated in the Kr. (German: *Kreis* = district) Ostholstein, at Jevenstedt, Kr. Rendsburg-Eckernförde (Hingst 1964) as well as at Schwissel, Kr. Segeberg (Behrends 1968). Looking beyond the Danish area, another common feature is that many of the German urn cemeteries are also orientated towards Bronze Age barrows, e.g. Mühlen Eichsen, Kr. Nordwestmecklenburg, in Mecklenburg-Western Pomerania (Ettel 2014, 174). Circular ditches with interruptions are also known from a few sites in Schleswig-Holstein, e.g. Bornhöved, Kr. Segeberg (Schaefer-Di Maida 2020; 2023), on the North Frisian Islands (Kersten/La Baume 1958, 73; Lütjens 1996, 74–76), and from the Low Countries (Louwen 2021, 60–61). The urn cemeteries in northern Germany contain up to 4,000 graves (Mühlen Eichsen), but like their Danish counterparts they date to the Pre-Roman Iron Age, although with a slightly longer duration (Ettel 2014).

https://doi.org/10.2369/9783869354439.beyond-urnfields

This paper has demonstrated that the Early Pre-Roman Iron Age urnfields in southern Jutland share the same burial tradition, defined by a set of norms and cremation rituals, although with some regional differences. The urnfields were established at approximately the same time, around 500 BC, and most of them were abandoned in the middle of the Pre-Roman Iron Age (period I.1a–II.1b/II.2a). Only a few, such as Aarupgaard urnfield, were still in use until 150–100 BC.

Cremations were dominant and osteological analyses of the human cremated remains show that the pyres were generally well constructed and often reached temperatures above 800 °C. Men, women and children of all age groups were interred at the urnfields, suggesting that all individuals from the local community had burial rights in these communal burial grounds. Urn burials are the dominant grave type in southern Jutland in this period, with the majority of graves containing only one individual. A particular type of urn grave is the urnfield grave, which is surrounded by a circular ditch with one or more interruptions. Variations in the size of the burial monument and the urn itself can be at least partly explained by the age and sex of the interred individual. Different burial constructions, e.g. cairns in contrast to earthen mounds, show regional variations, but different construction elements and burial practices, such as the use of circular ditches, mounds or simple urn graves, are also found within the same urnfields. Some of the variations in burial customs seem to reflect changing trends in urnfield burial customs over time, so cenotaphs and cremation pits became more common in the later phases of the Pre-Roman Iron Age.

The grave goods are rather homogenous and seem to have been subject to strict regulation. The inclusion of secondary vessels in the urn graves is also characteristic of the later phases and shows a growing diversity of burial customs. The secondary vessels might be associated with ritual and symbolic activities, providing the ancestors with food offerings. Such offerings were probably contemporaneous with the internment, considering that only up to two secondary vessels have been found in a circular ditch.

Grave goods made of metal are gender neutral, with the exception of a few special objects, such as neck rings that are associated with the female sphere and reflect the age, status, individual identity or different roles of a person in the society.

The structure of the urnfields and the way in which the monuments relate to each other show the importance of group affiliation and the collective burial custom. We see burial monuments situated very close to each other, and the placement of children's graves outside burial monuments likely also shows close familial ties. Monuments with two opposing interruptions or circular ditches that overlap also seem to indicate ancestral relationships in the burial ground. Aarupgaard and Uldal urnfields were both established next to one or more ancient barrows, but they are not connected to contemporary settlements. At Uldal, there were probably several small grave groups separated by open spaces that, over time, merged into a large communal burial ground. So, some of the urnfields could represent communal burial sites with several, separate grave groups, perhaps different families, households or lineages of a local community.

Most of the Danish urnfields remain unpublished today, but they hold great potential for studying the transition from the Bronze Age to the Iron Age, the different burial practices, artefact types, their chronology and relation to age and sex. We lack knowledge about the structure of the urnfields, their demography, the different grave groups and the status of children. The large urnfield of Aarupgaard holds a unique possibility to study all topics concerning the Danish urnfield tradition. For contextualising the archaeological and scientific results (e.g. ^{14}C-dating and strontium isotope analysis), it is of great importance to have all the cremated human remains from Aarupgaard analysed. The results of this analysis would be of great importance for both regional and supra-regional studies of burial sites with urns, as this would improve our knowledge of the Pre-Roman Iron Age urn cemeteries in northern Europe in general.

https://doi.org/10.2369/9783869354439.beyond-urnfields

Bibliography

Aner/Kersten 1984: E. Aner/K. Kersten, Die Funde der älteren Bronzezeit des nordischen Kreises in Dänemark, Schleswig-Holstein und Niedersachsen VII (Copenhagen 1984).

Becker 1959: C. J. Becker, Einige dänische Fibelformen der jüngsten Bronzezeit. In: A. von Müller (ed.), Festschrift Otto-Friedrich Gandert zum sechzigsten Geburtstag. Berliner Beiträge zur Vor- und Frühgeschichte 2 (Berlin 1959) 12–18.

Becker 1961: C. J. Becker, Førromersk jernalder i Syd- og Midjylland. Nationalmuseets Skrifter, Større beretninger VI (København 1961).

Behrends 1968: R.-H. Behrends, Ein Urnengräberfeld der vorrömischen Eisenzeit in Holstein. Offa-Bücher 2 (Neumünster 1968).

Brandt 2001: J. Brandt, Jastorf und Laténe. Kultureller Austausch und seine Auswirkungen auf soziopolitische Entwicklungen in der vorrömischen Eisenzeit. Internationale Archäologie 66 (Rahden/Westf. 2001).

Bräuning 2014: R. Bräuning, Die Bestattungssitten der Jastorfkultur. In: J. Brandt/B. Rauchfuß (eds.), Das Jastorf-Konzept und die vorrömische Eisenzeit im nördlichen Mitteleuropa. Beiträge der Internationalen Tagung zum einhundertjährigen Jubiläum der Veröffentlichung der „Ältesten Urnenfriedhöfe bei Uelzen und Lüneburg" durch Gustav Schwantes, 18.–22.05.2011 in Bad Bevensen. Veröffentlichung des Archäologischen Museums Hamburg und Stadtmuseums Harburg 105 (Hamburg 2014) 81–91.

Ettel 2014: P. Ettel, Das Gräberfeld von Mühlen Eichsen, Mecklenburg-Vorpommern. Zum Stand der Ausgrabung, Aufarbeitung und Auswertung. In: J. Brandt/B. Rauchfuß (eds.), Das Jastorf-Konzept und die vorrömische Eisenzeit im nördlichen Mitteleuropa. Beiträge der Internationalen Tagung zum einhundertjährigen Jubiläum der Veröffentlichung der „Ältesten Urnenfriedhöfe bei Uelzen und Lüneburg" durch Gustav Schwantes, 18.–22.05.2011 in Bad Bevensen. Veröffentlichung des Archäologischen Museums Hamburg und Stadtmuseums Harburg 105 (Hamburg 2014) 169–222.

Fahlander/Oestigaard 2008: F. Fahlander/T. Oestigaard (eds.), The Materiality of Death. Bodies, burials, beliefs. BAR International Series 1768 (Oxford 2008).

Gonçalves et al. 2015: D. Gonçalves/V. Campanacho/T. Thompson/R. Mataloto, The weight of the matter. Examining the potential of skeletal weight for the bioarchaeological analysis of cremation at the Iron Age necropolis of Tera (Portugal). In: T. Thompson (ed.), The Archaeology of Cremation. Burned Remains in Funerary Studies (Oxford 2015) 63–96.

Harvig 2019: L. Harvig, Osteologisk undersøgelse af brændt skeletmateriale fra tuegravfeltet Aarupgaard, 500–100 f.Kr. Unpubl. report, Museum Sønderjylland, Arkæologi Haderslev (Haderslev 2019).

Hingst 1962: H. Hingst, Zur Typologie und Verbreitung der Holsteiner Gürtel. Offa 19, 1962, 69–90.

Hingst 1964: H. Hingst, Jevenstedt. Ein Urnenfriedhof der älteren vorrömischen Eisenzeit im Kreis Rendsburg-Eckernförde, Holstein (Neumünster 1964).

Hingst 1976: H. Hingst, Grabhügelfelder der jüngeren Bronze- und frühen Eisenzeit aus Schleswig-Holstein. Offa 33, 1976, 66–122.

Hingst 1986: H. Hingst, Urnenfriedhöfe der vorrömischen Eisenzeit aus dem östlichen Holstein und Schwansen. Offa-Bücher 58 (Neumünster 1983).

Hingst 1989: H. Hingst, Urnenfriedhöfe der vorrömischen Eisenzeit aus Südostholstein. Offa-Bücher 67 (Neumünster 1989).

Hofmann 2014: K. Hofmann, Auf der Suche nach der Jastorf-Fibel. Die älterkaiserzeitlichen Plattenfibeln Norddeutschlands – eine Leitform? In: J. Brandt/B. Rauchfuß (eds.), Das Jastorf-Konzept und die vorrömische Eisenzeit im nördlichen Mitteleuropa. Beiträge der Internationalen Tagung zum einhundertjährigen Jubiläum der Veröffentlichung der „Ältesten Urnenfriedhöfe bei Uelzen und Lüneburg" durch Gustav Schwantes, 18.–22.05.2011 in Bad Bevensen. Veröffentlichung des Archäologischen Museums Hamburg und Stadtmuseums Harburg 105 (Hamburg 2014) 129–142.

Hucke 1962: K. Hucke, Die Holsteiner Gürtel im nordöstlichen Teile ihres Verbreitungsgebietes. Offa 19, 1962, 45–68.

Hucke 1972: K. Hucke, Das Urnenfeld im Ruser Steinbusch bei Högsdorf, Kr. Plön. In: Führer zu vor- und frühgeschichtlichen Denkmälern 10. Hansestadt Lübeck, Ostholstein (Kiel 1972) 183–191.

Jensen 2005: C. K. Jensen, Kontekstuel kronologi – en revision af det kronologiske grundlag for førromersk jernalder i Sydskandinavien. LAG 7 (Højbjerg 2005).

Johansen 1990: E. Johansen, En brandgravplads med smykkefund fra førromersk jernalder. Kuml 1990, 45–56.

Jørgensen 1971a: E. Jørgensen, Liden tue. Skalk 1971(2), 3–7.

Jørgensen 1971b: E. Jørgensen, Tuegravpladsen ved Årupgård. Haderslev Amts Museum 13(2), 1971, 72–77.

Jørgensen 1972: E. Jørgensen, Tuegravpladsen ved Årupgård II. Haderslev Amts Museum 13(3), 1972, 105–109.

Jørgensen 1975: E. Jørgensen, Tuernes mysterier. Skalk 1975(1), 3–10.

Jørgensen 2006: E. Jørgensen, Uldal. In: Reallexikon der Germanischen Altertumskunde 31 (Berlin, New York 2006) 391–393.

Jørgensen/Lewring 1999: E. Jørgensen/A. Lewring, Berigtigelse. Skalk 1999(1), 28–31.

Keiling 1971: H. Keiling, Eine besondere Kettenplattenschmuckform der vorrömischen Eisenzeit von Tangermünde, Kreis Stendal. Jahresschrift für mitteldeutsche Vorgeschichte 55, 1971, 189–219.

Keiling 1977: H. Keiling, Neue Holsteiner Gürtel aus Mecklenburg und die Verbreitung der rechteckigen Plattengürtelhaken. Bodendenkmalpflege in Mecklenburg, Jahrbuch 1977, 63–105.

Kersten/La Baume 1958: K. Kersten/P. La Baume, Vorgeschichte der Nordfriesischen Inseln (Neumünster 1958).

Konstantin-Hansen 2013: N. H. Konstantin-Hansen, Migration i førromersk jernalder. Kuml 2013, 9–40.

https://doi.org/10.2369/9783869354439.beyond-urnfields

Lorange 2015: T. Lorange, Det sakrale landskab ved Årre. Landskabets hukommelse gennem 4.000 års gravriter. In: P. Foss/N. A. Møller (eds.), De dødes landskab – grav og gravskik i ældre jernalder i Danmark. Beretning fra et colloquium i Ribe den 19.–20. marts 2013. Arkæologiske Skrifter 13 (København 2015) 21–36.

Louwen 2021: A. Louwen, Breaking and making the ancestors. Piecing together the urnfield mortuary process in the Lower-Rhine-Basin, ca. 1300–400 BC (Leiden 2021).

Lütjens 1996: I. Lütjens, Zur vorrömischen Eisenzeit in Nordfriesland. Die Gräberfelder von Ahrenshöft LA 36 und Achtrup LA 27. Offa 58, 1996, 27–136.

Møller et al. 2020: N. A. Møller/L. L. Harvig/B. Grundvad, The Iron Age Urnfield Tradition of Southwestern Jutland, Denmark. Acta Archaeologica 91(1), 2020, 11–80.

Rose 2020: H. A. Rose, Bayesian chronological modelling of the Early Iron Age in Southern Jutland, Denmark. PhD dissertation, Kiel University (Kiel 2020). https://macau.uni-kiel.de/receive/macau_mods_00001258.

Schaefer-Di Maida 2020: S. Schaefer-Di Maida, Bronzezeitliche Transformationsprozesse in Schleswig-Holstein am Beispiel vom Fundplatz von Mang de Bargen, Bornhöved (Kr. Segeberg). Unpubl. PhD dissertation, Kiel University (Kiel 2020).

Schaefer-Di Maida 2023: S. Schaefer-Di Maida, Unter Hügeln. Bronzezeitliche Transformationsprozesse in Schleswig-Holstein am Beispiel des Fundplatzes von Mang de Bargen (Bornhöved, Kr. Segeberg) (Leiden 2023).

Terkildsen 2005: K. F. Terkildsen, En vurdering af social stratifikation i førromersk jernalder med udgangspunkt i Årupgård grav-pladsen. Unpubl. Master thesis, Aarhus University (Aarhus 2005).

Terkildsen 2015: K. F. Terkildsen, Gravpladsen Årupgård som kilde til social stratifikation i førromersk jernalder. In: P. Foss/N. A. Møller (eds.), De dødes landskab – grav og gravskik i ældre jernalder i Danmark. Beretning fra et colloquium i Ribe den 19.–20. marts 2013. Arkæologiske Skrifter 13 (København 2015) 51–70.

Lisbeth Christensen
Museum Sønderjylland, Arkæologi Haderslev
Haderslev
Denmark
lich@msj.dk

https://doi.org/10.2369/9783869354439.beyond-urnfields

Burial and settlement during the Early Pre-Roman Iron Age in south-central Jutland

Scott Robert Dollar, Martin Egelund Poulsen and Lars Grundvad

Keywords: Danish Early Pre-Roman Iron Age, urnfields, settlements, south-central Jutland

Abstract: The area of modern Vejen municipality, located in the interior of south-central Jutland, is situated near several of the largest known urnfield sites in southwestern Jutland, such as Aarupgaard, Aarre and Uldal. However, the period of the Danish urnfield tradition, the Early Pre-Roman Iron Age (500–250/200 BC), is not well represented archaeologically, especially in comparison to the region along the west coast of Jutland. This is despite 30 years of intensive development-led archaeology, where many other prehistoric periods are well represented. This paper will survey the archaeological evidence for burial and settlement during the Early Pre-Roman Iron Age in the micro-region of Vejen. It will present the only three investigated urnfield sites, Foldingbro, Tuesbøl and Kalvmose, as well as the single circular ditch urn burial Rønnehave, which is the region's only ^{14}C-dated burial from the period. The paper will present the contemporary settlement evidence for the study area, which is dominated by refuse pits and relatively few and poorly preserved house-structures, along with the methodological problems concerning these sites and what they represent archaeologically. The low frequency of burial and settlement sites shows that the study area, while clearly a cultural part of the broader Early Pre-Roman Iron Age Urnfield tradition, was peripheral to the more intensively utilised regions along the southwest coast of Jutland.

Introduction

The area of modern Vejen municipality[1] – situated in the interior of south-central Jutland – covers a micro-region that straddles the diverse landforms of eastern and western Jutland. Most periods of Danish prehistory are well represented archaeologically, such as the Late Neolithic (Dollar 2012; Poulsen/Dollar 2019), Early Bronze Age (Dollar/Poulsen 2015; Poulsen 2020b) or the Early Roman Iron Age (Dollar/Krøtel 2016; Møller/Dollar 2022). This does however not include the Early Pre-Roman Iron Age[2] (EPRIA), the period covering the Danish urnfield tradition. The period is not absent archaeologically, but evidence for burial and settlement is less visible in comparison

1 Vejen here refers to the municipality in the Region of Southern Denmark. The municipality was established as an amalgamation of four smaller municipalities – Holsted, Brørup, Vejen, Rødding – in 2006, and is Sønderskov Museum's area of archaeological responsibility.

2 This article uses the two-period division for the Pre-Roman Iron Age devised by Jensen (2005) and Martens (1997) with the Early Pre-Roman Iron Age (EPRIA) starting around 500 BC and ending between 250/200 BC.

https://doi.org/10.2369/9783869354439.beyond-urnfields

to many other periods in prehistory. This is despite the micro-region's relative proximity to several of the largest urnfield sites in southern and southwestern Jutland: Aarupgaard, Aarre and Uldal (Fig. 1).

After nearly 30 years of development-led archaeology within the municipality, only three urnfield sites have thus far been identified, and the total number of EPRIA burials, including those not related to urnfields, is relatively small. Only 42 burials or burial-related features are dated to this period, with more than half of the burials coming from the three urnfields. Similarly, the archaeological evidence for EPRIA settlement is limited. Settlement sites are characterised by refuse pits and limited evidence of buildings (Møller/Dollar 2022).

This paper will assess the archaeological evidence of the EPRIA in the micro-region of Vejen municipality, the methodological problems and how this relates to our broader regional understanding of burial and settlement in southwestern Jutland.

Landscape

The micro-region of Vejen is situated 13–16 km from the western coastline along the Wadden Sea and 20–25 km from the Little Belt strait between Jutland and the island of Funen. The geological landscape was shaped by the melting of the Weichselian glacial ice sheet. The central and western part of Vejen is characterised by hilly islands of older moraine deposits of mixed sandy and clay soils from the Riss-Saale glaciation. This is bounded in the east by the north-south stationary line of the Weichselian glacial ice sheet, which divides the old and young moraine landscapes of Jutland. From

Fig. 1. Map of southwestern Jutland with Vejen municipality shaded in green; EPRIA burial sites mentioned in the text in relation to several well-known urnfields (graphics Sønderskov Museum, background map by The Agency for Data Supply and Efficiency).

https://doi.org/10.2369/9783869354439.beyond-urnfields

here, several rivers run from east to west through large outwash plains formed by glacial rivers during the last Ice Age. These rivers bisect the moraine hilly islands and flow out to the Wadden Sea. The largest of these rivers, the Kongeå River, runs through the centre of the study area.

The Kongeå River, and likely the other river systems, was part of a larger network of prehistoric transport corridors. This transport network is reflected in part by the positioning of prehistoric burial monuments, primarily round barrows. Vejen has a large concentration of barrows dating primarily to the Later Neolithic and Early Bronze Age, and their distribution shows intersecting lines, covering long distances in the landscape. These so-called barrow lines have early in Danish archaeology been interpreted as representing the location of ancient routeways (Müller 1904; Johansen et al. 2004), many of which have a long use-life continuing well into the modern period.

History of archaeological investigations in Vejen

Before looking at the evidence for the EPRIA in Vejen in more detail, a basic understanding of the history of archaeological investigations within the study area is needed. Despite the area's wealth of prehistoric burial monuments that have been a focus for antiquarian and early modern archaeological research in the late 19th and the first half of the 20th century (e.g. Boye 1896, 96–100; Müller 1904; Thrane 1962; Poulsen/Grundvad 2016), the history of modern archaeological investigation is short.

Modern archaeological field methods were developed in Denmark during the 1960s and 1970s through a series of large-scale research excavations of primary Iron Age settlements in northern and western Jutland, such as Grøntoft, Hodde, and Drengsted (Becker 1971; Hvass 1975; 1980; see also Møller et al. 2011, 7). These were fundamental to the development of field methods that are still in use today in development-led archaeology. Yet, before the beginning of the 1980s, no large-scale modern archaeological investigation had ever been undertaken in Vejen. The few archaeological excavations carried out prior to 1980 were antiquarian and private excavations of varying quality as well as a few small-scale excavations undertaken by the National Museum, mostly of prehistoric burial monuments. Most archaeological sites were chance discoveries during construction, roadworks, or agricultural work. The first large-scale modern investigations took place during the early 1980s and were carried out prior to construction of a nationwide gas pipeline network (Rigsantikvarens Arkæologiske Sekretariat 1987). Multiple sites in Vejen were investigated, including three sites with refuse pits dating to the EPRIA (Gejsingvej, Gesten Skov, Bulagergård; ibid.).[3] These excavations were all undertaken by local archaeological museums placed outside the modern Vejen municipality.

In 1990, Sønderskov Museum was established in Vejen as a state-recognised local museum with archaeological responsibility for the geographical area north of the Kongeå River. Around the same time, plans were finalised for a new motorway scheme between Esbjerg and Kolding, of which approximately 29 km were planned to run through Vejen municipality. Almost the entire route was systematically investigated using reconnaissance, phosphate analyses and trial trenching (Knudsen/Rindel 1994). A large and diverse geographical area within Vejen was investigated. This led to the discovery of numerous important sites from the Mesolithic to the early historical period (Rindel 1995), but out of the many trial excavations and subsequent area excavations, only six sites produced

3 VKH 851 Gejsingvej, FF 190101-71; VKH 852 Gesten Skov, FF 190103-57; ESM 1018/VKM 425 Bulagergård, FF 190110-62. The numbering 'FF 000000-00' refers to a site's unique registration number in the Danish Registry of National Sites and Monuments.

https://doi.org/10.2369/9783869354439.beyond-urnfields

discernible datable evidence from the EPRIA.[4] No burials were found, and except for remains of one possible post-built structure, only isolated refuse pits were documented.

Since the motorway excavations, Vejen municipality, like most of Denmark, has seen an increase in development-led archaeology. This is particularly evident after implementation of the 2001 Museums Act that resulted in a significant expansion of developer-funded archaeology and thus the number of large-scale excavations (see Mikkelsen 2012 for an overview of the 2001 Museums Act in English). Despite this increase, both in the number and size of excavations, the archaeological evidence for the EPRIA in the region remains limited in comparison to other periods in prehistory.

Overview of the archaeological data for the EPRIA

The following survey of EPRIA urnfield and settlement material in Vejen is the result of a review of sites dating to the EPRIA in the Danish Ministry of Culture's database of registered archaeological remains – the Registry of National Sites and Monuments. As the main repository for archaeological sites in Denmark, the registry is a valuable research tool in Danish archaeology, although the database has several problems (see e.g. Møller 2011, 156–158). The registry is constructed over reports of monuments, finds and investigations from over a century. An archaeological site has a unique number and can cover a wide variety of archaeological features. A site can be a burial monument or an individual urn, a chance discovery of potsherds during building works or a flint axe from a ploughed field. At the other end of the scale, a site can include a cemetery with hundreds of burials or an entire excavated Iron Age village covering several hectares. Additionally, the quality of the registration of individual sites can vary greatly, often based on when the site was first documented. Some sites have detailed descriptions, as with newer archaeological investigations that can include excavation reports, whereas older sites' entries may contain limited information.

There are also issues concerning the dating of sites in the database. This is particularly the case for older excavated sites, where archaeological remains can have chronologically broad relative dates covering hundreds or even thousands of years, e.g. 'Stone Age' or 'Early Iron Age', whereas other sites can have very specific dates based on typological dating, usually of artefacts. Many newer excavations will also be dated by ^{14}C-dating. As part of the following survey of EPRIA sites in Vejen, it has been necessary to assess the dating accuracy of individual sites to determine whether they should be included in this overview. Only sites that with some certainty could be dated to the EPRIA have been included. Also included are sites that cover the transition between the Late Bronze Age Period VI and the EPRIA, reflecting the gradual transition as evidenced in material culture.

The survey evaluated 3,496 archaeological sites covering a time span from the Late Palaeolithic to the early modern period from the study area; out of these 84 sites dating to the EPRIA were included. These sites consisted of 68 settlement sites, 14 burial sites and two votive sites (Fig. 2). Archaeological remains dating to the EPRIA were only represented on 2.4 % of all registered sites in the study area. No pit zone alignments, a type of boundary formation consisting of a belt of shallow open pits, or Celtic fields have yet been documented archaeologically in Vejen.

4 HBV 284 Surhave, FF 190301-175; HBV 285 Stensvanggård, FF 190301-173; HBV586 Enghøjgård III, FF 190101-88; HBV 595 Nørregård II, 190101-82; HBV 605 Gejsinggård, FF 190101-100; HBV 610 Refsgård, FF 190101-103.

https://doi.org/10.2369/9783869354439.beyond-urnfields

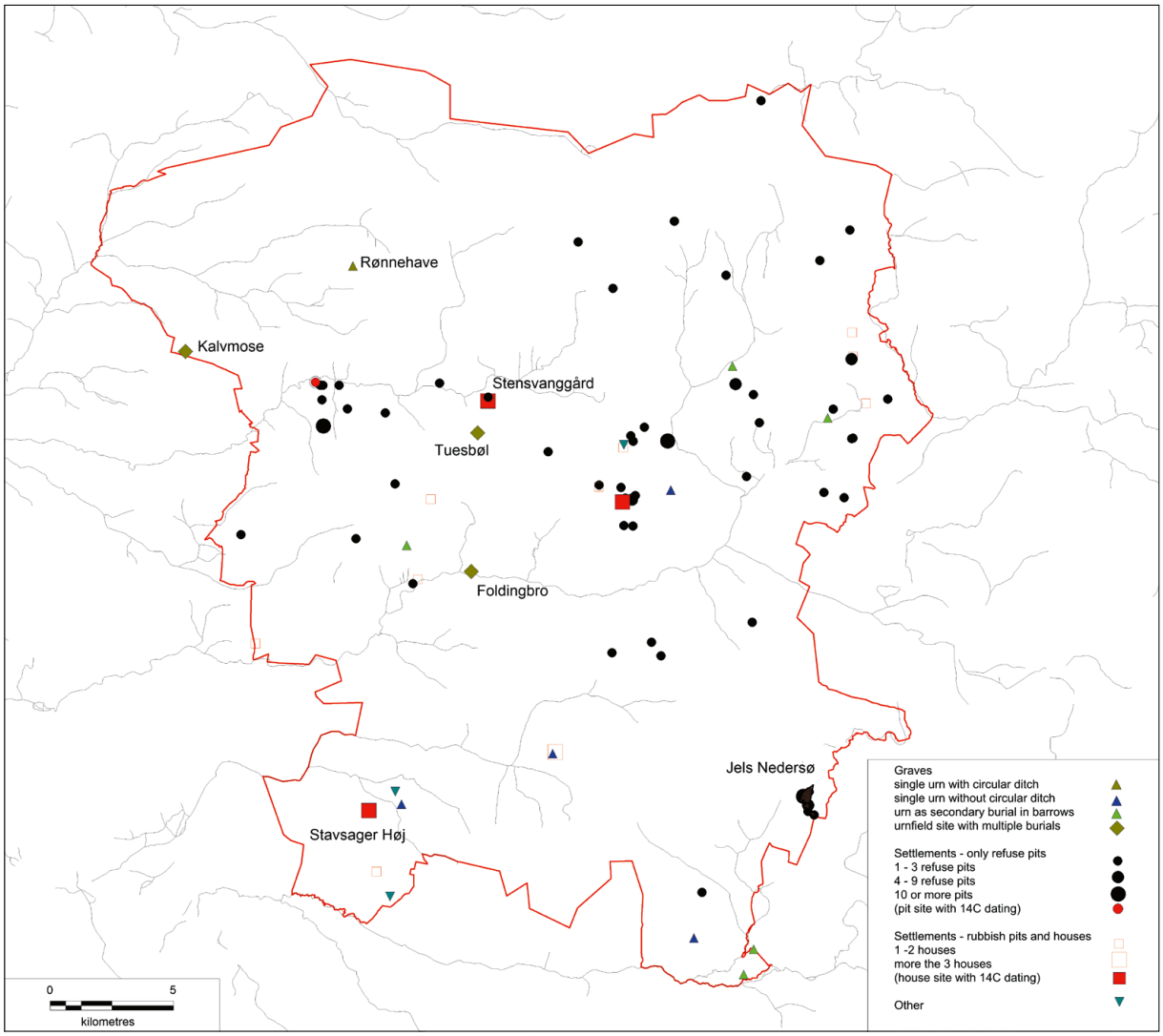


Fig. 2. Distribution of different site types dated to the EPRIA in Vejen municipality (graphics Sønderskov Museum).

Urnfields and single burials – few and far between

In Becker's survey of the Early Iron Age in central and southern Jutland (Becker 1961), he listed only two burials from two different sites in Vejen municipality, both discovered as secondary burials in older round barrows dating to the Neolithic and Bronze Age. Our survey of EPRIA burials in Vejen documents 42 burials from 14 sites, including several burial features without cremations, such as circular ditches without preserved urns or vessels without cremated bone, that are often interpreted as cenotaphs (Becker 1961, 167; Møller et al. 2020, 33–36). Out of the 42 burials, 29 are from three urnfield cemeteries: Foldingbro, Tuesbøl and Kalvmose.[5]

The total number of EPRIA burial sites and burials in Vejen is small. To put it into perspective, a recent excavation of an urnfield east of Store Darum, situated 13 km from the western limits of Vejen near the coast of the Wadden Sea, contained 46 urn burials, most with circular ditches (see Qvist-

5 ESM 1255 Foldingbro, FF 190302-100; HBV 1261 Tuesbøl, FF 190301-228; HBV 1542 Kalvmose, FF 190208-146.

https://doi.org/10.2369/9783869354439.beyond-urnfields

GAARD 2020). This single urnfield has more documented burials than the total number of known EPRIA burials in Vejen.

While few in numbers, the urnfields at Foldingbro, Tuesbøl and Kalvmose share many common traits with other EPRIA burials and urnfields in southern and western Jutland. That is, cremation burials placed in urns, sometimes with grave goods, and interred centrally in a small burial mound that was enclosed by a circular ditch (MØLLER et al. 2020, 13). Currently, only a single urn burial from Rønnehave has been ^{14}C-dated,[6] and this lack of ^{14}C-dates is a typical problem with EPRIA burials (ibid., 18). EPRIA burials are often only relatively dated through artefact or grave form typochronologies. The remaining 13 EPRIA burials are all urn burials from eleven sites. Eight of these burials were secondary burials found in six round barrows, mostly discovered during antiquarian excavations. The remaining five burials are all single burial finds, four without any traces of mounds or circular ditches and one with a circular ditch (Rønnehave). Only Foldingbro, Tuesbøl and Kalvmose urnfields and the single urn from Rønnehave will be considered in the analysis below.

Foldingbro

The first urnfield investigated in Vejen was excavated on a sandy ridge 50 m from the northern bank of the Kongeå River, east of the village Foldingbro. Foldingbro is historically significant as an important river crossing over the Kongeå. The site was discovered by an amateur archaeologist in 1982 who notified the local museum of finds from three ploughed up urns. Esbjerg Museum, who had the archaeological responsibility at the time, organised an excavation of an area of 75 x 75 m (SIEMEN 1982). This revealed six urn burials that were in various states of destruction due to cultivation, a common problem seen at many urnfields investigated over the last 40 years (MØLLER et al. 2020, 16). There was evidence of three circular ditches surrounding three urns. Several supposed urn pits were not excavated, as they were unaffected by cultivation. It was estimated that the site contained at least ten burials at the time it was excavated, though due to the small scale of the excavation and destruction due to cultivation, this assessment is likely too low.

No further excavations have been carried out since 1982, but a review of aerial photos taken in 2010 revealed a series of three to five circular cropmarks that are the same size and character as urnfield circular ditches. While not yet confirmed through excavation, the urnfield potentially contains more burials.

Tuesbøl

The next urnfield was found 24 years later. Tuesbøl urnfield was investigated through development-led archaeology due to an expansion of a housing development in the western part of Brørup in 2006, approximately 5 km north from Foldingbro. The site has previously been published (DOLLAR/GRUNDVAD 2015), but excavation results are briefly summarised in the following.

The site was first identified as a Late Neolithic settlement site during trial excavation prior to development, but the consequent excavation also uncovered several urns and four circular ditches which were identified as belonging to an urnfield. The Danish Ministry of Culture granted extra funds for the excavation of the urnfield, as there were no resources to excavate both the urnfield and the Late Neolithic settlement without additional financial assistance. The urnfield had clearly been negatively impacted by intensive cultivation and was in a poor state of preservation. The excavation covered an area of 6,800 m^2 and revealed 16 burials and burial features (Fig. 3). Thirteen burials were typical EPRIA cremation urns in different states of preservation – four vessels were still intact, whereas the remaining nine were in various states of degradation. Only two urns were surrounded by circular ditches. Two additional circular ditches were excavated, one with a centrally placed pit

6 HBV 1784 Rønnehave, FF 190304-130.

https://doi.org/10.2369/9783869354439.beyond-urnfields

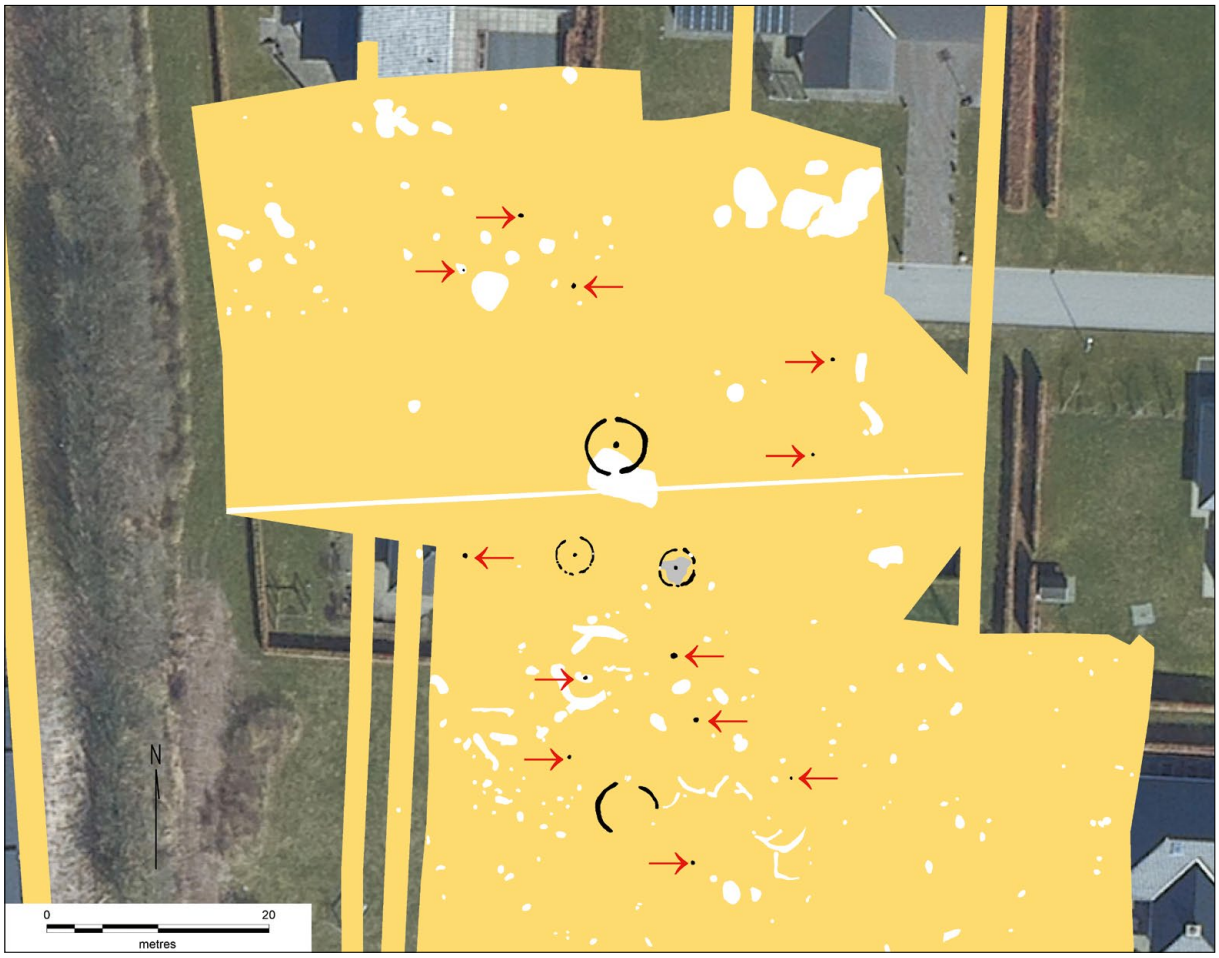


Fig. 3. Excavation plan of Tuesbøl urnfield. Arrows point to urn burials without circular ditches (graphics Sønderskov Museum).

that contained no urn, and the other with no trace of a burial. The final feature interpreted as a cenotaph burial was a vessel of a type typically used as urn which contained neither cremated remains nor grave goods. Cenotaph burials (Dollar/Grundvad 2015, 18) are a phenomenon seen at other Danish urnfields such as Jernvedlund (Becker 1961, 167), Søhale (Møller et al. 2020, 33–36) and Vedbæk (ibid., 50). Despite the poor preservation and the lack of financial resources for post-excavation analyses, the Tuesbøl urnfield shares many commensalities with other urnfield sites in southwest Jutland. No osteological analysis or ^{14}C-datings have yet been undertaken.

Kalvmose

The third and final urnfield from Vejen is Kalvmose (Poulsen 2016), which is also the most insecure in its interpretation as an urnfield site due to the lack of intact urns. Three circular ditches were discovered during trial excavation for a high-voltage electrical cable project that ran through the western part of the municipality. The urnfield is situated on a small plateau, in a landscape that less than a century earlier was predominantly heathlands and bogs. No urns were found in the centre of the circular ditches that were nearly completely destroyed by cultivation. There were no finds from the circular ditches, and the interpretation of this site as an urnfield is based solely on the size and character of the circular ditches.

Three samples of charred heather from each circular ditch were sent for ^{14}C-dating (Table 1). The calibrated ^{14}C-dates are significantly later than the EPRIA (two medieval and one post-medieval) and

https://doi.org/10.2369/9783869354439.beyond-urnfields

must be unrelated to the circular ditches. Instead, the samples most likely date the periodic anthropomorphic burning of heathlands and survived as secondary deposits in the once open circular ditches.

Rønnehave

The site of Rønnehave consists of a single cremation urn surrounded by a circular ditch (Poulsen 2019). It was located just 14 m east of a scheduled round barrow called Guldhøj and was discovered during excavations prior to a road expansion project. At this time, the site is classified as a single burial site rather than an urnfield cemetery, as no other burials were found during the excavations. However, the excavations covered only a limited area and it is not unlikely that there could be additional urn burials around the Guldhøj barrow.

The excavated urn from Rønnehave had been partly destroyed by cultivation and only the lower part of the circular ditch was preserved. The urn contained only cremated human remains without grave goods. Osteological analysis of the human remains shows that the deceased was likely a child or a slender adult, while it was not possible to determine the sex (Kveiborg 2019). The cremated bone has been ^{14}C-dated to between the 8th and 5th century BC (Table 1).

Settlements – an overrepresentation of refuse pits

Settlements in Vejen dating to the EPRIA have previously been covered in Becker's large regional survey of Early Iron Age sites in central and southern Jutland (Becker 1961). His catalogue includes six settlement sites within present-day Vejen, each represented by single refuse pits, but two recent studies have focused on the long-term settlement structure and dynamics during the Early Iron Age. The area south of the Kongeå was part of Rindel's regional study of settlement structure in southern Jutland (Rindel 1992), and Møller's big-data analyses of Early Iron Age settlement dynamics in western and southwestern Jutland included the area north of the River Kongeå (Møller 2011). Both studies demonstrate similar trends in the archaeological data, with the EPRIA represented by low intensity dispersed settlements that ended abruptly in the Late Pre-Roman Iron Age (Rindel 1992, 137–138; Møller 2011, 161). While quantitatively greater than the number of sites with burials, the qualitative evidence for EPRIA settlement in Vejen is comparatively not much better. Settlement sites consisted of 68 sites out of the total of 84 EPRIA dated sites. Archaeological evidence from these 68 sites includes 228 refuse pits but only remains of 23 house structures.

In Becker's survey there was an overrepresentation of settlement sites in Jutland consisting of pits without structures from his Period I (Becker 1961, 126). Many pits contained a diverse range of vessels that were interpreted as representing a household's inventory, even though houses were not documented (ibid.). At the time of his survey, only a few sites in northern and western Jutland had evidence for houses. Since Becker's survey, many sites with longhouses have been excavated in western and northern Jutland. Yet, EPRIA settlement sites in Vejen municipality are for the most part still dominated by sites with refuse pits filled with varying quantities of pottery sherds (n = 55), but without any evidence of houses. 48 of these sites had one to three refuse pits, and another seven sites had four or more pits. These 'pit sites' are often situated relatively close together and likely reflect the resource area of a wandering settlement. This is the case just south of Jels Nedersø, where 20 years of investigation have documented 22 refuse pits at five separate sites within a 25 ha area.[7]

7 HAM 1285 Barsbølmarkvej 14, FF 200204-118; HAM 4254 Barsbøl Mark, FF 200204-159; HAM 4327 Store Barsbøl, FF 200204-160; HBV 1316 Nedersøparken, FF 200204-166; HBV 333 Barsbøl Mark – Stamvej, FF 200204-174.

https://doi.org/10.2369/9783869354439.beyond-urnfields

Table 1. ^{14}C-dates from EPRIA features from the sites of Kalvmose, Stensvanggård, Stavsager Høj, Rønnehave. Additional ^{14}C-dates from EPRIA features from two sites not mentioned in the article, Øster Skibelund and Holsted Åmark, are also included. [i] = FF no. denotes a site's unique ID-number in the Danish Registry of National Sites and Monuments; [ii] = all samples dated by Aarhus AMS Centre, Aarhus University – Department of Physics and Astronomy; [iii] = IntCal13: calibration curves in Reimer et al. 2013, Oxcal v4.1 calibration programme (Bronk Ramsey 2009), IntCal20: calibration curves in Reimer et al. 2020, Oxcal v4.4.2 calibration programme (Bronk Ramsey 2009); [iv] = possible influence of bomb ^{14}C, i.e. post-1955.

Site	FF no.[i]	Context	Dated Sample	Lab. No.[ii]	Calibration[iii]	^{14}C-age (BP)	Calibrated age
Kalvmose, HBV 1542	190208-146	Circular ditch A1	Charred plant, heather (*Calluna vulgaris*)	AAR 26084	IntCal13	512 ± 24	1411–1432 cal AD (68.2 %) 1399-1443 cal AD (95.4 %)
Kalvmose, HBV 1542	190208-146	Circular ditch A3	Charred plant, heather (*Calluna vulgaris*)	AAR 26085	IntCal13	127 ± 23 1955[iv]	1683–1930 cal AD (68.2 %) 1678–1940 cal AD (95.4 %)
Kalvmose, HBV 1542	190208-146	Circular ditch A6	Charred plant, heather (*Calluna vulgaris*)	AAR 26086	IntCal13	576 ± 26	1320–1408 cal AD (68.2 %) 1305–1417 cal AD (95.4 %)
Stensvanggård II, HBV 1554	190301-254	House K11, posthole	Charcoal, oak (*Quercus*)	AAR 29588	IntCal13	2435 ± 27	728–419 cal BC (68.2 %) 750–407 cal BC (95.4 %)
Stensvanggård II, HBV 1554	190301-254	House K11, posthole	Charcoal, hazel (*Corylus*)	AAR 29589	IntCal13	2263 ± 29	392–236 cal BC (68.2 %) 398–209 cal BC (95.4 %)
Stensvanggård II, HBV 1554	190301-254	House K11, posthole	Charcoal, ash (*Fraxinus*)	AAR 29590	IntCal13	3659 ± 30	2127–1976 cal BC (68.2 %) 2136–1948 cal BC (95.4 %)
Stensvanggård II, HBV 1554	190301-254	House K14, posthole	Charcoal, alder (*Alnus*)	AAR 29591	IntCal13	2197 ± 31	357–202 cal BC (68.2 %) 365–182 cal BC (95.4 %)
Stensvanggård II, HBV 1554	190301-254	House K14, posthole	Charcoal, hazel (*Corylus*)	AAR 29592	IntCal13	2187 ± 30	356–197 cal BC (68.2 %) 361–175 cal BC (95.4 %)
Stensvanggård II, HBV 1554	190301-254	House K14, posthole	Charcoal, hazel (*Corylus*)	AAR 29593	IntCal13	4676 ± 33	3516–3374 cal BC (68.2 %) 3624–3367 cal BC (95.4 %)
Stensvanggård II, HBV 1554	190301-254	House K17, posthole	Charcoal, hazel / alder (*Corylus/Alnus*)	AAR 29619	IntCal13	2274 ± 23	395–262 cal BC (68.2 %) 400–231 cal BC (95.4 %)
Stensvanggård II, HBV 1554	190301-254	House K17, posthole	Charcoal, oak (*Quercus*)	AAR 29620	IntCal13	2254 ± 24	385–235 cal BC (68.2 %) 394–209 cal BC (95.4 %)
Stensvanggård II, HBV 1554	190301-254	House K17, posthole	Charcoal, alder (*Alnus*)	AAR 29621	IntCal13	2207 ± 29	358–206 cal BC (68.2 %) 369–198 cal BC (95.4 %)
Stensvanggård II, HBV 1554	190301-254	House K19, posthole	Charred grain, barley (*Hordeum vulgare*)	AAR 29637	IntCal13	2165 ± 23	350–174 cal BC (68.2 %) 357–118 cal BC (95.4 %)

https://doi.org/10.2369/9783869354439.beyond-urnfields

► *Cont. table 1*

Site	FF no.[i]	Context	Dated Sample	Lab. No.[ii]	Calibration[iii]	^{14}C-age (BP)	Calibrated age
Stensvanggård II, HBV 1554	190301-254	House K19, posthole	Charcoal, birch (*Betula*)	AAR 29638	IntCal13	2159 ± 21	347–174 cal BC (68.2 %) 355–116 cal BC (95.4 %)
Stensvanggård II, HBV 1554	190301-254	House K19, posthole	Charcoal, poplar / willow (*Populus / Salix*)	AAR 29639	IntCal13	2196 ± 25	356–202 cal BC (68.2 %) 361–196 cal BC (95.4 %)
Stensvanggård II, HBV 1554	190301-254	Pit A598	Charred grain, barley (*Hordeum vulgare*)	AAR 29599	IntCal13	2433 ± 29	727–416 cal BC (68.2 %) 750–406 cal BC (95.4 %)
Stensvanggård II, HBV 1554	190301-254	Pit A598	Charcoal, alder (*Alnus*)	AAR 29600	IntCal13	2327 ± 40	429–264 cal BC (68.2 %) 535–231 cal BC (95.4 %)
Stensvanggård II, HBV 1554	190301-254	Pit A598	Charcoal, alder (*Alnus*)	AAR 29601	IntCal13	2305 ± 38	406–262 cal BC (68.2 %) 428–208 cal BC (95.4 %)
Stensvanggård II, HBV 1554	190301-254	Pit A458	Charred grain, barley (*Hordeum vulgare*)	AAR 29602	IntCal13	2272 ± 39	397–235 cal BC (68.2 %) 403–207 cal BC (95.4 %)
Stensvanggård II, HBV 1554	190301-254	Pit A451	Charcoal, alder (*Alnus*)	AAR 29603	IntCal13	2377 ± 25	479–399 cal BC (68.2 %) 535–395 cal BC (95.4 %)
Stensvanggård II, HBV 1554	190301-254	Pit A716	Charcoal, alder (*Alnus*)	AAR 29594	IntCal13	2208 ± 26	358–206 cal BC (68.2 %) 364–201 cal BC (95.4 %)
Stensvanggård II, HBV 1554	190301-254	Pit A749	Charcoal, alder (*Alnus*)	AAR 29595	IntCal13	2152 ± 29	350–119 cal BC (68.2 %) 357–92 cal BC (95.4 %)
Stensvanggård II, HBV 1554	190301-254	Pit A762	Charcoal, hazel (*Corylus*)	AAR 29604	IntCal13	2281 ± 39	400–236 cal BC (68.2 %) 405–208 cal BC (95.4 %)
Stensvanggård II, HBV 1554	190301-254	Pit A921	Charcoal, deciduous (*Durae arboris*)	AAR 29618	IntCal13	2215 ± 26	359–209 cal BC (68.2 %) 367–203 cal BC (95.4 %)
Stensvanggård II, HBV 1554	190301-254	Pit A1215	Charcoal, alder (*Alnus*)	AAR 29643	IntCal13	2165 ± 23	511–410 cal BC (68.2 %) 732–402 cal BC (95.4 %)
Stavsager Høj, HBV 1698	200107-280	House K6	Charred grain, (*Cerealia*)	AAR 32893	IntCal20	2326 ± 24	402–288 cal BC (68.2 %) 414–235 cal BC (95.4 %)
Stavsager Høj, HBV 1698	200107-280	House K6, posthole	Charred grain, barley (*Hordeum vulgare*)	AAR 32894	IntCal20	2255 ± 23	386–231 cal BC (68.2 %) 391–350 cal BC (95.4 %)
Stavsager Høj, HBV 1698	200107-280	House K6, posthole	Charred grain, barley (*Hordeum vulgare*)	AAR 32895	IntCal20	2313 ± 23	400–385 cal BC (68.2 %) 407–235 cal BC (95.4 %)

https://doi.org/10.2369/9783869354439.beyond-urnfields

► *Cont. table 1*

Site	FF no.[i]	Context	Dated Sample	Lab. No.[ii]	Calibration[iii]	^{14}C-age (BP)	Calibrated age
Stavsager Høj, HBV 1698	200107-280	Pit A36	Charcoal, fruit tree (*Pomoideae*)	AAR 29462	IntCal13	2260 ± 24	389–236 cal BC (68.2 %) 396–210 cal BC (95.4 %)
Stavsager Høj, HBV 1698	200107-280	Pit A36	Charcoal, alder (*Alnus*)	AAR 29463	IntCal13	2192 ± 37	357–199 cal BC (68.2 %) 374–169 cal BC (95.4 %)
Stavsager Høj, HBV 1698	200107-280	Pit A36	Charcoal, hazel (*Corylus*)	AAR 29464	IntCal13	2258 ± 24	387–236 cal BC (68.2 %) 396–210 cal BC (95.4 %)
Stavsager Høj, HBV 1698	200107-280	Pit A37	Charcoal, maple (*Acer*)	AAR 29465	IntCal13	2205 ± 25	357–205 cal BC (68.2 %) 362–201 cal BC (95.4 %)
Stavsager Høj, HBV 1698	200107-280	Pit A37	Charcoal, hazel (*Corylus*)	AAR 29466	IntCal13	2251 ± 26	383–234 cal BC (68.2 %) 393–209 cal BC (95.4 %)
Stavsager Høj, HBV 1698	200107-280	Pit A37	Charcoal, alder (*Alnus*)	AAR 29467	IntCal13	2413 ± 33	536–409 cal BC (68.2 %) 748–400 cal BC (95.4 %)
Stavsager Høj, HBV 1698	200107-280	Pit 261	Charcoal, fruit tree (*Pomoideae*)	AAR 29468	IntCal13	2285 ± 23	396–365 cal BC (68.2 %) 401–235 cal BC (95.4 %)
Stavsager Høj, HBV 1698	200107-280	Pit 261	Charcoal, ash (*Fraxinus*)	AAR 29469	IntCal13	2220 ± 24	360–210 cal BC (68.2 %) 372–204 cal BC (95.4 %)
Stavsager Høj, HBV 1698	200107-280	Pit 261	Charcoal, fruit tree (*Pomoideae*)	AAR 29470	IntCal13	2247 ± 26	381–233 cal BC (68.2 %) 391–208 cal BC (95.4 %)
Rønnehave, HBV 1784	190304-130	Urn burial A1	Burnt human bone	AAR 31397	IntCal13	2436 ± 26	728–429 cal BC (68.2 %) 750–407 cal BC (95.4 %)
Øster Skibelund, HBV 1408	190307-203	House K36, wall ditch	Charcoal, fruit tree (*Prunus*)	AAR 33573	IntCal20	3170 ± 31	1495–1417 cal BC (68.2 %) 1504–1326 cal BC (95.4 %)
Øster Skibelund, HBV 1408	190307-203	House K36, wall ditch	Charcoal, alder (*Alnus*)	AAR 33574	IntCal20	2273 ± 30	393–232 cal BC (68.2 %) 398–207 cal BC 95.4 %)
Øster Skibelund, HBV 1408	190307-203	House K36, wall ditch	Charcoal, hazel (*Corylus*)	AAR 33575	IntCal20	2348 ± 33	462–385 cal BC (68.2 %) 540–370 cal BC (95.4 %)
Holsted Åmark II HBV 1454	190304-107	Pit A4824	Charred grain, barley (*Hordeum vulgare*)	AAR 20410	IntCal13	2391 ± 29	489–403 cal BC (68.2 %) 728–397 cal BC (95.4 %)

https://doi.org/10.2369/9783869354439.beyond-urnfields

Today, nearly 60 years after Becker's survey, the picture of the EPRIA has however changed with the numerous finds of settlements with predominantly single longhouses in central and western Jutland. The houses typically consisted of four to five sets of roof-bearing posts with centrally placed entrances that divide the houses into two equal parts. Wall trenches are often found at one or both ends of the houses. In some cases, a single, small four-post structure is found in association with a longhouse. In comparison to earlier and later periods, the longhouses are generally smaller, often 5–6 m wide and on average 13 m long (Webley 2007, 458; 2008, 51–53).

Despite 30 years of intensive development-funded archaeology, only 13 sites in Vejen have provided evidence for houses dating to the EPRIA. Ten of the sites had one to three houses, and the remaining three sites had evidence for three or more houses. Most of these houses have been relatively dated using house-typology or through association to nearby refuse pits containing EPRIA pottery, and in many cases the date is questionable. Only three sites have houses that have been ^{14}C-dated (Stensvanggård, Øster Skibelund, Stavsager Høj).[8] The archaeological preservation is generally poor, and out of the 24 houses only four had evidence of wall ditches (Birkely, Harreby, Tobøl, Stavsager Høj)[9] and one had evidence of walls constructed of small wooden posts (Kongehøj II).[10] The width of most houses is usually indicated by the location of entrances, centrally placed opposite each other along each the of the long walls. The narrow diameter of the postholes in the houses, which correlate with the size of the timbers used, indicate that these houses had relatively short lifespans. In the following, two selected settlement sites will be looked at in more detail.

Stensvanggård

The Stensvanggård settlement is located on a sandy sloping hill near the modern village of Brørup. It contained evidence for EPRIA occupation, with both house structures and refuse pits, as well as occupation in the Roman and Germanic Iron Age and the late Viking Age or Early Medieval Period. Another site with EPRIA pits is located just north of the Stensvanggård settlement.[11]

The EPRIA occupation phase at Stensvanggård consists of five three-aisled houses and at least 31 refuse pits containing EPRIA pottery. The five houses (K11, K14, K17, K19 and K21) were situated 25–46 m apart with similar orientations (Fig. 4). The houses were small structures with four to five sets of roof-bearing posts and remains of entrances in the central parts. No postholes or trenches in connection with the walls were preserved. The postholes of the roof-bearing and entrance posts were 20–40 cm wide and 5–25 cm deep. The original dimensions of the houses were between 10–15 m in length and around 4.5–5 m in width (Poulsen 2020a, 10). If we consider these houses from Stensvanggård as representative for EPRIA house structures in Vejen, we should expect that the small and shallow character of structural posts from houses would leave little to no archaeological traces due to modern intensive cultivation practices. No finds are datable by typo-chronology, but charred archaeobotanical samples from four houses have been ^{14}C-dated to the EPRIA (Table 1).

31 refuse pits contained potsherds dated to the EPRIA, 14 pits contained large amounts of sherds. Eight refuse pits have been ^{14}C-dated to the EPRIA (Table 1). The refuse pits were found across the excavation area, though with a higher concentration in the northern part of the settlement, in the vicinity of houses K11 and K14 (Fig. 4). The latter house also had a pit containing EPRIA pottery within its interior space, though we cannot be certain if it was contemporary with that structure.

8 HBV 1554 Stensvanggård II, FF 190301-254; HBV 1408 Øster Skibelund, FF 190307-203; HBV 1698 Stavsager Høj, FF 200107-280.

9 HBV 434 Birkely, FF 190307-175; HAM 4653 Harreby, FF 200107-259; HBV 1410 Tobøl p-plads, FF 190303-179; HBV 1698 Stavsager Høj, FF 200107-280.

10 HBV 1275 Kongehøj II, FF 190307-208.

11 HBV 285 Stensvanggård, FF 190301-173, previously mentioned under note 4.

https://doi.org/10.2369/9783869354439.beyond-urnfields

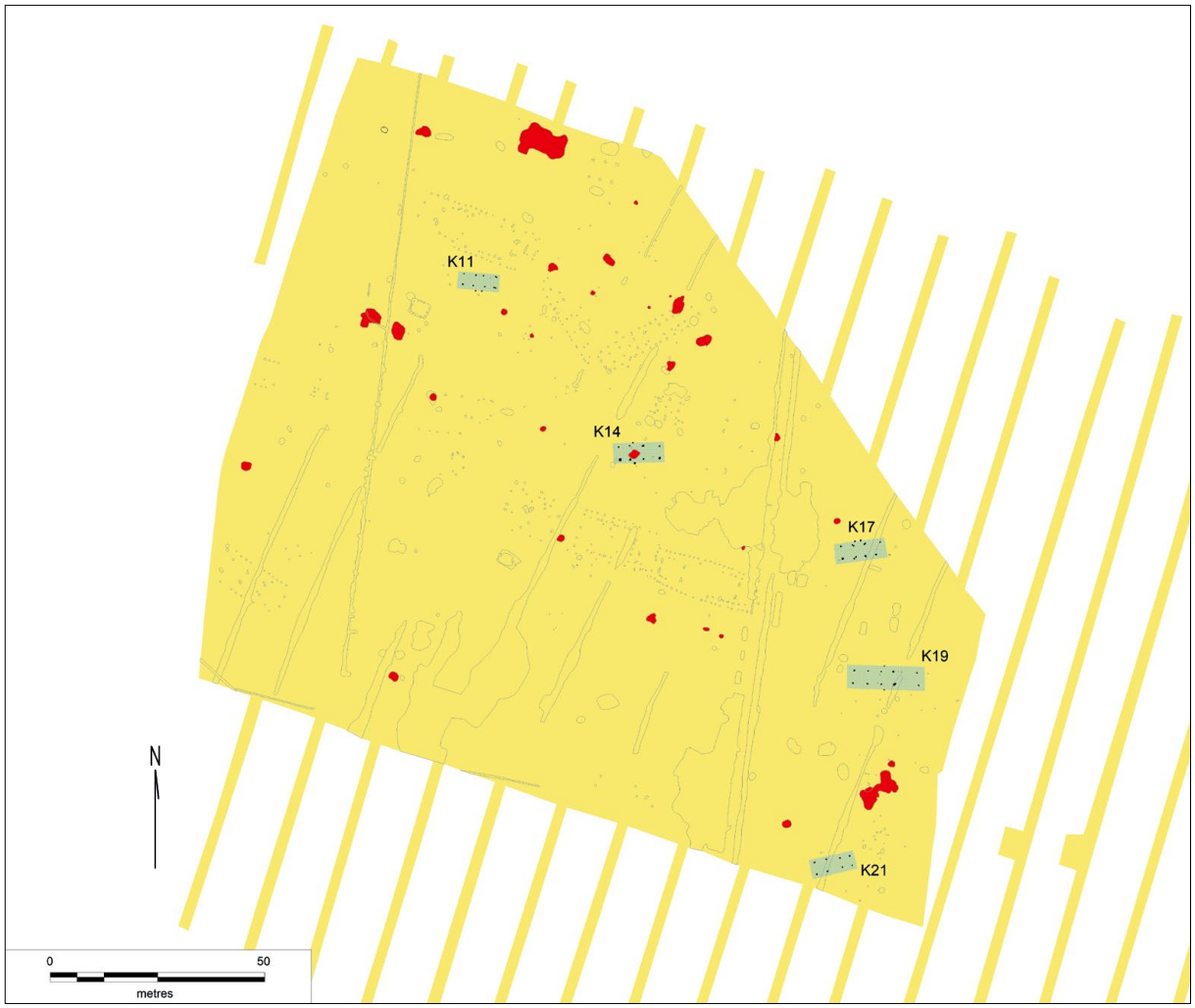


Fig. 4. Excavation plan of the settlement at Stensvanggård. The five EPRIA houses (K11, K14, K17, K19, K21) are shown in green; pits containing ERPIA potsherds are marked in red (graphics Sønderskov Museum).

The refuse pits at Stensvanggård were typically 20–80 cm deep, and had the site been more intensely cultivated, likely only the pits would still have been archaeologically visible. Preservation conditions represent a general problem for the small EPRIA houses, and they are likely at least part of the explanation of the overrepresentation of sites with pits contra the number of documented house structures in Vejen.

Stavsager Høj

Stavsager Høj is the most atypical EPRIA site in Vejen. It is situated next to a large Bronze Age round barrow and has several activity phases from the Bronze Age to the 6th century AD. Its later phases include multiple sacred dryland depositions, cult houses and two large culture layers containing artefacts (Grundvad 2021). The EPRIA phase site includes at least two houses and at least 23 atypically large cooking pits filled with EPRIA potsherds situated just south of the houses. Nine samples of charred archaeobotanical remains, three samples from each of the three of the pits, have been ^{14}C-dated to the EPRIA (Table 1). House K6 is ^{14}C-dated (Table 1) and House K11 is dated typologically. The presence of wall ditches in the eastern end of house K11 and centrally placed entrances in house K6 make both houses typical for the EPRIA, with the exception of their deep

https://doi.org/10.2369/9783869354439.beyond-urnfields

postholes for roof-bearing posts that were up to 60 cm in depth. The excavations at Stavsager Høj are still ongoing and further analyses are yet to come.

Conclusion

Based on our survey of Vejen, it is clear that the study area had a peripheral character during the EPRIA in comparison to the regions along the southwest coast of Jutland. The tendency toward fewer and architecturally smaller houses likely began already in the Late Bronze Age. The lack of burial and settlement evidence might be real, but it might also reflect the period's methodological problems concerning poor site preservation, or more likely, a combination of both aspects. In comparison to the heathland regions of western Jutland this micro-region in south-central Jutland may have been more intensely cultivated in later prehistory and the historical periods, which could explain the fragmentary character of the urnfields in Vejen.

The issue of preservation conditions is relevant in relation to EPRIA settlement material where pits are clearly overrepresented. Since large refuse pits can measure up to 1 m in depth, they have a better chance of surviving modern cultivation. This is in contrasts to the few documented house structures, which have comparatively more shallow features and thus a more ephemeral character. It is possible that most house remains have been destroyed by modern cultivation on many sites where otherwise only refuse pits have been documented.

The few small EPRIA houses in Vejen represent ephemeral structures with short lifespans that perhaps survived for only a few decades before they had to be replaced. This is in contrast to house remains found along the west coast, which in some instances have deep postholes for roof-bearing posts and wall-trenches (e.g. Qvistgaard 2019, 28–29), but where, more importantly, also settlement sites with house remains occur more frequently. In this respect, it is interesting that Stavsager Høj, the EPRIA settlement situated furthest to the west within Vejen, is also the only site with deep postholes. Perhaps some sites consisting of only refuse pits, without evidence for house remains, could represent short-term, occasional or seasonal settlement, where permanent house structures were unnecessary (Møller/Dollar 2022, 150).

The inland micro-region of Vejen, situated on either side of the River Kongeå, is characterised by a dispersed settlement pattern with small short-lived houses during the EPRIA. Although clearly a cultural part of the broader 'Urnfield tradition', we interpret the area as being peripheral to the more intensively utilised regions along the southwest coast of Jutland. This is supported by the low frequency of burials and urnfields in the micro-region.

Bibliography

Becker 1961: C. J. Becker, Førromersk jernalder i Syd- og Midtjylland. Nationalmuseets Skrifter, Større beretninger VI (København 1961).

Becker 1971: C. J. Becker, Früheisenzeitliche Dörfer bei Grøntoft, Westjütland. 3. Vorbericht: Die Ausgrabungen 1967–68. Acta Archaeologica 42, 1971, 79–110.

Boye 1896: V. Boye, Fund af Egekister fra Bronzealderen i Danmark. Et monografisk Bidrag til Belysning af Bronzealderens Kultur (Kjøbenhavn 1896).

Bronk Ramsey 2009: C. Bronk Ramsey, Bayesian analysis of radiocarbon dates. Radiocarbon 51(1), 2009, 337–360.

Dollar 2012: S. R. Dollar, Hustomter fra senneolitikum og tidligste bronzealder i Vejen kommune. Arkæologi i Slesvig/Archäologie in Schleswig 14, 2012, 39–49.

Dollar/Grundvad 2015: S. R. Dollar/L. Grundvad, Tuesbøl. En tuegravplads ved Brørup fra ældre førromersk jernalder. In: P. Foss/N. A. Møller (eds.), De dødes landskab. Grav og gravskik i ældre jernalder i Danmark. Arkæologiske Skrifter 13 (København 2015) 15–20.

Dollar/Krøtel 2016: S. R. Dollar/J. Krøtel, Vejen Vestermark – A row settlement from the Early Roman Iron Age in Southern Jutland. Arkæologi i Slesvig/Archäologie in Schleswig 16, 2016, 115–129.

https://doi.org/10.2369/9783869354439.beyond-urnfields

Dollar/Poulsen 2015: S. R. Dollar/M. E. Poulsen, Early Bronze Age Settlements at Vejen in Southern Jutland, Denmark: New Perspectives on the Three-aisled Longhouses from Period II. In: P. Suchowska-Ducke/S. S. Reiter/H. Vandkilde (eds.), Forging Identities. The Mobility of Culture in Bronze Age Europe 2. BAR International Series 2772 (Oxford 2015) 171–177.

Grundvad 2021: L. Grundvad, Jernalderofringer fra Stavsager Høj ved Fæsted – en foreløbig præsentation af deponeringer og kontekster. Arkæologi i Slesvig/Archäologie in Schleswig 18, 2021, 119–318.

Hvass 1975: S. Hvass, Das eisenzeitliche Dorf bei Hodde, Westjütland. Vorläufiger Bericht. Acta Archaeologica 46, 1975, 142–158.

Hvass 1980: S. Hvass, Die Struktur einer Siedlung der Zeit von Christi Geburt bis ins 5. Jahrhundert nach Christus. Ausgrabungen in Vorbasse, Jütland, Dänemark. Studien zur Sachsenforschung 2, 1980, 161–180.

Jensen 2005: C. K. Jensen, Kontekstuel kronologi – en revision af det kronologiske grundlag for førromersk jernalder i Sydskandinavien. LAG 7 (Højbjerg 2005).

Johansen et al. 2004: K. L. Johansen/S. T. Laursen/M. K. Holst, Spatial patterns of social organization in the Early Bronze Age of South Scandinavia. Journal of Anthropological Archaeology 23(1), 2004, 33–55.

Knudsen/Rindel 1994: S. A. Knudsen/P. O. Rindel, Hvordan finder vi fortidsminderne? In: J. Hertz/S. Nielsen (eds.), 5000 år under motorvejen. Vejdirektoratet/Rigsantikvarens Arkæologiske Sekretariat (København 1994) 21–25.

Kveiborg 2019: J. Kveiborg, HBV 1784. Rønnehave. Osteologisk analyse af kremeret humant skeletmateriale fra urnegrav. Unpubl. Rapport FHM 4296/2847, Moesgård Museum – Afdeling for Konservering og Naturvidenskab (Højbjerg 2019).

Martens 1997: J. Martens, The Pre-Roman Iron Age in Northern Jutland. In: J. Martens (ed.), Chronological Problems of the Pre-Roman Iron Age in Northern Europe: Symposium at the Institute of Prehistoric and Classical Archaeology, University of Copenhagen, December 8, 1992. Arkæologiske Skrifter 7 (Copenhagen 1997) 107–136.

Mikkelsen 2012: M. Mikkelsen, Development-led archaeology in Denmark. In: L. Webley/M. Vander Linden/C. Haselgrove/R. Bradley (eds.), Development-led Archaeology in Northwest Europe: Proceedings of a Round Table at the University of Leicester 19th–21st November 2009 (Oxford 2012) 117–127.

Møller 2011: N. A. Møller, Dynamiske bebyggelsesmønstre? Ældre jernalderens bebyggelser i landskabet. In: N. A. Møller/S. S. Qvistgaard/S. F. Jensen (eds.), Nyt fra Vestfronten. Nord- og vestjyske bebyggelser fra ældre jernalder. Arkæologiske Skrifter 10 (København 2011) 155–171.

Møller/Dollar 2022: N. A. Møller/S. R. Dollar, Multilinear Settlement Development and Nucleation during the Early Iron Age in Southwestern Jutland, Denmark (Chapter 10). In: A. Gyucha/R. B. Salisbury (eds.), Archaeology of Nucleation in the Old World: Spatiality, Community, and Identity (Oxford 2022) 142–156.

Møller et al. 2011: N. A. Møller/S. S. Qvistgaard/S. F. Jensen, Bebyggelsesarkæologi Anno 2010. In: N. A. Møller/S. S. Qvistgaard/S. F. Jensen (eds.), Nyt fra Vestfronten. Nord- og vestjyske bebyggelser fra ældre jernalder. Arkæologiske Skrifter 10 (København 2011) 7–12.

Møller et al. 2020: N. A. Møller/L. L. Harvig/B. Grundvad, The Iron Age Urnfield Tradition of Southwestern Jutland, Denmark. Acta Archaeologica 91, 2020, 11–80.

Müller 1904: S. Müller, Vei og Bygd i Sten- og Bronzealderen. Aarbøger for Nordisk Oldkyndighed og Historie 1904, 1–64.

Poulsen 2016: M. E. Poulsen, Beretning for arkæologisk forundersøgelse af HBV j.nr. 1489 Horns Rev 3, Endrup – Holsted inkl. HBV 1542 Kalvmose. Unpubl. excavation rapport, Museet på Sønderskov (Sønderskov 2016).

Poulsen 2019: M. E. Poulsen, Beretning for arkæologisk følgeundersøgelse af HBV j.nr. 1665 Grindstedvej etape 1–2 inkl. HBV 1784 Rønnehave. Unpubl. excavation rapport, Museet på Sønderskov (Sønderskov 2019).

Poulsen 2020a: M. E. Poulsen, Beretning for arkæologisk udgravning af HBV 1554 Stensvanggård II. Unpubl. excavation rapport, Museet på Sønderskov (Sønderskov 2020).

Poulsen 2020b: M. E. Poulsen, Treskibede bulvægshuse og deres vestdanske udbredelse. Om regionalitet og monumentalitet i ældre bronzealder periode II–III. Arkæologi i Slesvig/Archäologie in Schleswig 18, 2020, 273–288.

Poulsen/Dollar 2019: M. E. Poulsen/S. R. Dollar, Late Neolithic houses – seen from the perspective of South Jutland. In: L. R. Sparrevohn/O. T. Kastholm/P. O. Nielsen (eds.), Houses for the Living. Two-aisled houses from the Neolithic and Early Bronze Age in Denmark. Volume 1 – Text. Nordiske Fortidsminder 31.1 (København 2019) 343–355.

Poulsen/Grundvad 2016: M. E. Poulsen/L. Grundvad, En fundrig overgrav i Klelund Plantage – glimt af enkeltgravstidens slutning i Sydvestjylland. Aarbøger for nordisk Oldkyndighed og Historie 2016 (2018), 63–85.

Qvistgaard 2019: S. S. Qvistgaard, Udgravningsberetning for SJM 383 II Myrtueparken. Unpubl. excavation rapport, Sydvestjyske Museer (Ribe 2019).

Qvistgaard 2020: S. S. Qvistgaard, Udgravningsberetning for SJM 908 Korsvanggård. Unpubl. excavation rapport, Sydvestjyske Museer (Ribe 2020).

Reimer et al. 2013: P. J. Reimer/E. Bard/A. Bayliss/J. W. Beck/P. G. Blackwell/C. Bronk Ramsey/C. E. Buck/H. Cheng/R. L. Edwards/M. Friedrich/P. M. Grootes/T. P. Guilderson/H. Haflidason/I. Hajdas/C. Hatté/T. J. Heaton/D. L. Hoffmann/A. G. Hogg/K. A. Hughen/K. F. Kaiser/B. Kromer/S. W. Manning/M. Niu/R. W. Reimer/D. A. Richards/E. M. Scott/J. R. Southon/R. A. Staff/C. S. M. Turney/J. van der Plicht, IntCal13 and Marine13 radiocarbon age calibration curves 0–50,000 years cal BP. Radiocarbon 55(4), 2013, 1869–1887.

Reimer et al. 2020: P. J. Reimer/W. E. N. Austien/E. Bard/A. Bayliss/P. G. Blackwell/C. Bronk Ramsey/M. Butzin/H. Cheng/R. L. Edwards/M. Friedrich/P. M. Grootes/T. P. Guilderson/I. Hajdas/T. J. Heaton/

https://doi.org/10.2369/9783869354439.beyond-urnfields

A. G. Hogg/K. A. Hughen/B. Kromer/S. W. Manning/R. Muscheler/J. G. Palmer/C. Pearson/J. van der Plicht/R. W. Reimer/D. A. Richards/E. M. Scott/J. R. Southon/C. S. M. Turney/L. Wacker/F. Adolphi/U. Büntgen/M. Capano/S. M. Fahrni/A. Fogtmann-Schulz/R. Friedrich/P. Köhler/S. Kudsk/F. Miyake/J. Olsen/F. Reinig/M. Sakammoto/A. Sookdeo/S. Talamo, The IntCal20 northern hemisphere radiocarbon age calibration curve (0–55 cal kbp). Radiocarbon 62(4), 2020, 725–757.

Rigsantikvarens Arkæologiske Sekretariat 1987: Rigsantikvarens Arkæologiske Sekretariat (ed.), Danmarks længste udgravning. Arkæologi på naturgassens vej 1979–86 (Herning 1987).

Rindel 1992: P. O. Rindel, Ældre jernalders bebyggelse i Sønderjylland. Bebyggelsesmønstre, ressourceudnyttelse og centerdannelser i ældre jernalder. In: U. L. Hansen/S. Nielsen (eds.), Sjællands Jernalder. Arkæologiske Skrifter 6 (København 1992) 133–157.

Rindel 1995: P. O. Rindel, Ved vejs ende. Udgravningerne på motorvejens østetape 1994. Museumsavisen 26, 1995, 6–13.

Siemen 1982: P. Siemen, Beretning for arkæologisk undersøgelse af ESM 1255 Foldingbro. Unpubl. excavation rapport, Esbjerg Museum (Esbjerg 1982).

Thrane 1962: H. Thrane, Hjulgraven fra Storehøj ved Tobøl i Ribe Amt. Kuml 1962, 80–112.

Webley 2007: L. J. Webley, Households and social change in Jutland, 500 BC–AD 200. In: C. Haselgrove/T. Moore (eds.), The Later Iron Age in Britain and Beyond (Oxford 2007) 454–467.

Webley 2008: L. Webley, Iron Age Households – Structure and Practice in Western Denmark, 500 BC – AD 200. Jutland Archaeological Society Publications 62 (Højbjerg 2008).

Scott Robert Dollar
Sønderskov Museum
Brørup
Denmark
sd@sonderskov.dk

Martin Egelund Poulsen
Sønderskov Museum
Brørup
Denmark
mep@sonderskov.dk

Lars Grundvad
Sønderskov Museum
Brørup
Denmark
lg@sonderskov.dk

https://doi.org/10.2369/9783869354439.beyond-urnfields

Billumvad urnfield and some other sites with circular ditches in the western part of Jutland

Lene B. Frandsen

Keywords: Billumvad urnfield, circular ditches, western Jutland, Pre-Roman Iron Age, intrusion into cremation graves

Abstract: Just east of Oksbøl, not far from the west coast of Denmark, the larger part of an urnfield with circular ditches was excavated in 2013. The burial site was not investigated in its entirety, but it appears that the excavated area represents the centre of an urnfield, as evidenced by the remains of a couple of Stone Age mounds, which probably formed the starting point for the Pre-Roman Iron Age burial site. The features within the circular ditches vary greatly; there are cremation graves with or without urns, bone-layer graves and pits with vessels or pottery sherds, but no bones. Remarkably, many of the pits, which are centrally placed in the circular ditches, have no cremated bones. The same types of features were also seen between the circular ditches, where a few cooking pits and postholes have been found. The design of the circular ditches also varies, both in terms of size and number of entrances. There is a long tradition of finding this kind of cremation burial site in this part of Denmark, and now and then new sites with circular ditches emerge on arial photos or in connection with excavation activity. Some of the well-known and newly discovered sites will be mentioned in a discussion about the ritual use of the urnfield.

Introduction

Archaeology West Jutland's (ArkVest's) geographical area of responsibility covers 2,734 km^2 in the western part of Jutland (Fig. 1). There is a long tradition of excavating urnfields with circular ditches in the area, and there is something very captivating and even magical about these areas that are covered with cremation graves and circular ditches.

My own interest in the subject started in 2008 when, together with Tine Lorange, I revisited the Årre Urnfield (Lorange 2015). It was disheartening to see how the site has been levelled out from so many years of ploughing. We carried out a rescue excavation before the laying of a new power cable for an offshore wind park which, though minor, gave us the opportunity to focus on aspects other than just the urn graves, such as what lay between the circular ditches and how the ditches differ in size and shape. In the following years, we returned for further excavations to discover the extent of the urnfield. Before 2008, we did not know the exact location of the classic Årre urnfield, but thanks to Tine Lorange's work digitising the old excavation plans, using GPS in the field, and the fact that the 2008 campaign overlapped with previous excavations, we now have a map of old and new excavations at Årre (Fig. 2).

https://doi.org/10.2369/9783869354439.beyond-urnfields

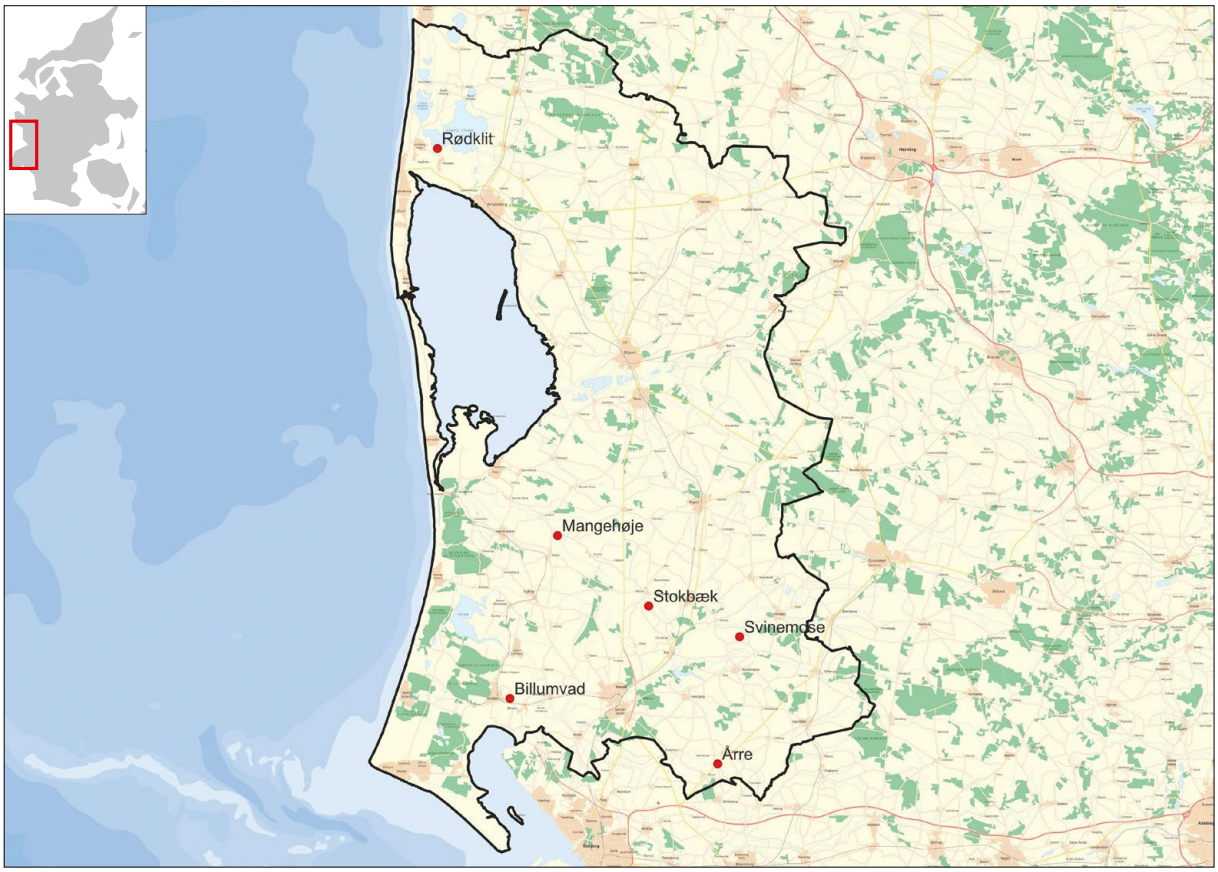


Fig. 1. Archaeology of West Jutland's (ArkVest's) responsibility area, with Billumvad and other sites mentioned in the text (map after dataforsyningen.dk, with additions by ArkVest).

Classic urnfield sites

In 1892, A. P. Madsen excavated 250 graves in Årre in just three weeks. The term 'excavated' is maybe wrong here – he dug a hole in the middle of each mound, pulled out the urns and brought only the intact ones back to the National Museum. In 1892, each mound was still visible, and we owe him great thanks for saving the artefacts and for a lot of important information. Madsen describes the mounds as generally 2–8 m in diameter, with a height of 30–60 cm, and, quite interestingly, he found 15–20 cm deep ditches around some of them. Each mound covered only one urn that had been placed at the bottom of the mound, in a few cases even above ground level, but generally dug into the subsoil, except for three instances where he could not find any signs of graves at the bottom of the mounds, and another three instances where he only found a few pottery sherds without any bones. He also describes an example of a mound with two complete vessels, again without any trace of cremated bones (Madsen/Neergaard 1894, 172).

C. J. Becker revisited the Årre urnfield in 1953 and 1954. At that time, there was nothing left of the small mounds from the Pre-Roman Iron Age, but some of the older and larger mounds from the Bronze and Stone Ages were still visible. Improvements in excavation techniques were an important factor by then, and Becker showed interest in features other than the urn graves themselves. An important goal of his excavation was to determine whether circular ditches surrounded all the Iron Age mounds (Becker 1961, 147). He found traces of circular ditches in the subsoil and observed that some of them were closed and some of them had entrances. By examining the typology of the differ-

https://doi.org/10.2369/9783869354439.beyond-urnfields

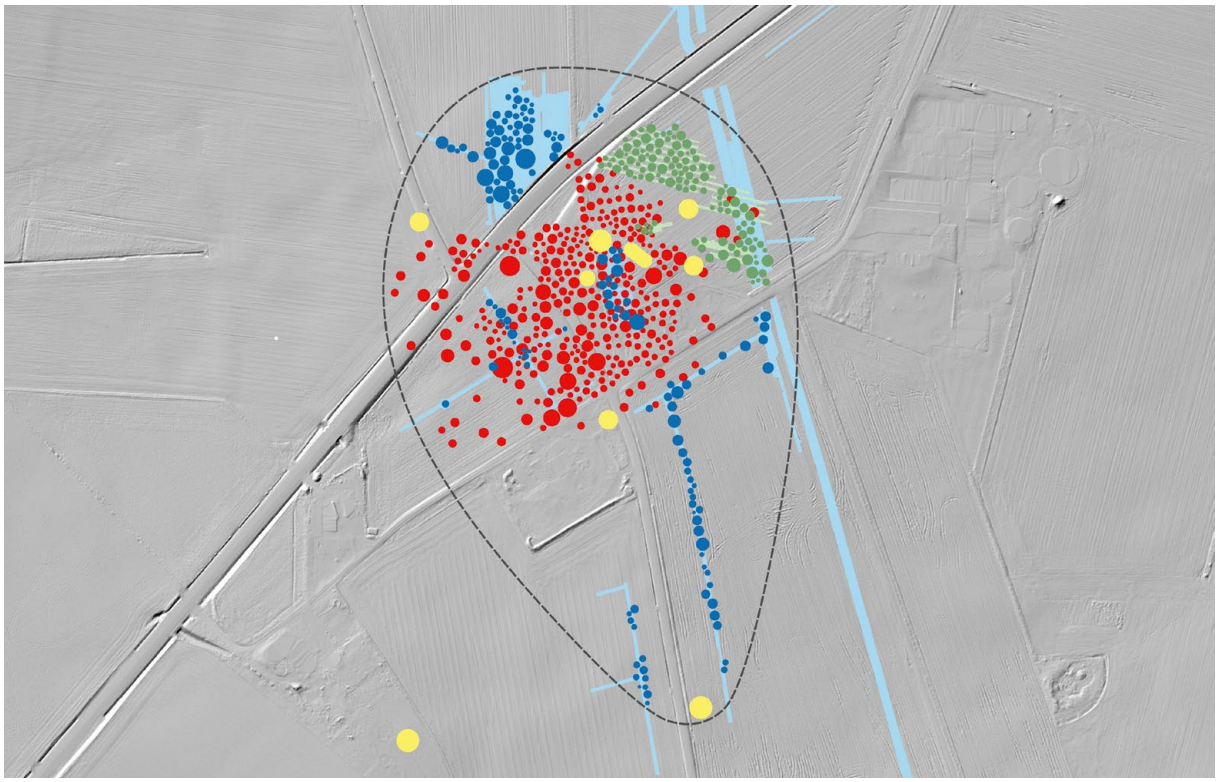


Fig. 2. LiDAR-scan of Årre urnfield showing the different excavations. Black dotted line: supposed extension of the urnfield; yellow: older mounds; red: excavations by A. P. Madsen in 1892; green: excavations by C. J. Becker in 1953/54; blue: excavations by Varde Museum and ArkVest 2008–2023 (map after dataforsyningen.dk, with addition by ArkVest).

ent types of urns and small finds, he hypothesised a horizontal development of the urnfield. The urn graves closest to the Stone Age mounds were the oldest ones, and he noticed that the circular ditches belonging to them were often closed, larger and more irregular. The younger ones were smaller and had entrances. This was verified by excavations in 2010 and 2012 (Lorange 2015).

Today, we only know of one urnfield in our area where the circular ditches are still visible: Mangehøje (also known as Langsiggaarde; cf. Becker 1961, 118; Møller et al. 2020, 16 fig. 5). In 1902, A. P. Madsen excavated 14 of the minor mounds from the Pre-Roman Iron Age situated there between large mounds from the Stone or Bronze Ages. Thanks to early heritage protection, a small part of this urnfield has survived until today.

Billumvad urnfield

The Billumvad urnfield is situated between Varde and Blåvand in the Oksbøl area. Varde Museum (later ArkVest) has, over the last 30 years, excavated a large number of settlements (Møller 2013) and a few Iron Age burial sites (Frandsen/Westphal 1996; Frandsen 2001; Fisker/Andresen 2017). The excavation in 2013 was prompted by the landowner's wish to deep plough the area.[1] Fortunately, we knew from aerial photos that an urnfield was situated there (Fig. 3), but its extent and preservation were unknown. We uncovered around 5,000 m² and found that the majority of the area

1 Billumvad J. Nr. VAM1787. Fund og Fortidsminder: 190714-195. Excavated by Lene B. Frandsen and Sara Gerlevsen.

https://doi.org/10.2369/9783869354439.beyond-urnfields

Fig. 3. Billumvad urnfield. The circular ditches are clearly visible as crop-marks (photo L. H. Olesen, Holstebro Museum).

was covered with circular ditches (Fig. 4). The northeast boundary of the urnfield seems to have been determined now, while the site continues beyond the excavated area in all other directions. A trial trench was dug in a southeasterly direction without reaching the full extent of the urnfield.

A total of 71 circular ditches were found, with 46 of these within the excavated area which were uncovered in their entirety. However, not all were complete as some had been partially ploughed away. Their diameters vary from 1.6 m to 14 m. It seems that the starting point for this burial site must have been three Stone Age mounds, which have been totally levelled out today. There is great variation in the size and shape of the circular ditches; some are closed and others have from one to four entrances. The closed and largest circular ditches are situated nearest the Stone Age mounds. Circular ditches with two entrances are the most common and, with a few exceptions, the entrances are located opposite each other and oriented approximately north-south. In some cases, the entrances are connected so that some of the mounds seem linked together with a passageway going straight through two or three of them. The depth of the circular ditches is up to 43 cm, and sometimes a change in colour of the subsoil was the only detectable trace. Stones were found in about ten of the circular ditches, which in some cases seemed to have been placed at the bottom on purpose, but the majority were probably deposited there many years later, when the ditches were levelled. Pottery sherds in the fill were few, but a secondary vessel was apparently carefully placed in one circular ditch. No postholes were found in any of the ditches.

Pottery and grave goods

Only nine of the cremation graves contained grave goods, mostly small pieces of bronze or iron that were too fragmented to be identified. The best preserved are two circular heads of pins dated to the Pre-Roman Iron Age period I.2a/I.2b (Jensen 2005). The few vessels with preserved rims or handles

https://doi.org/10.2369/9783869354439.beyond-urnfields

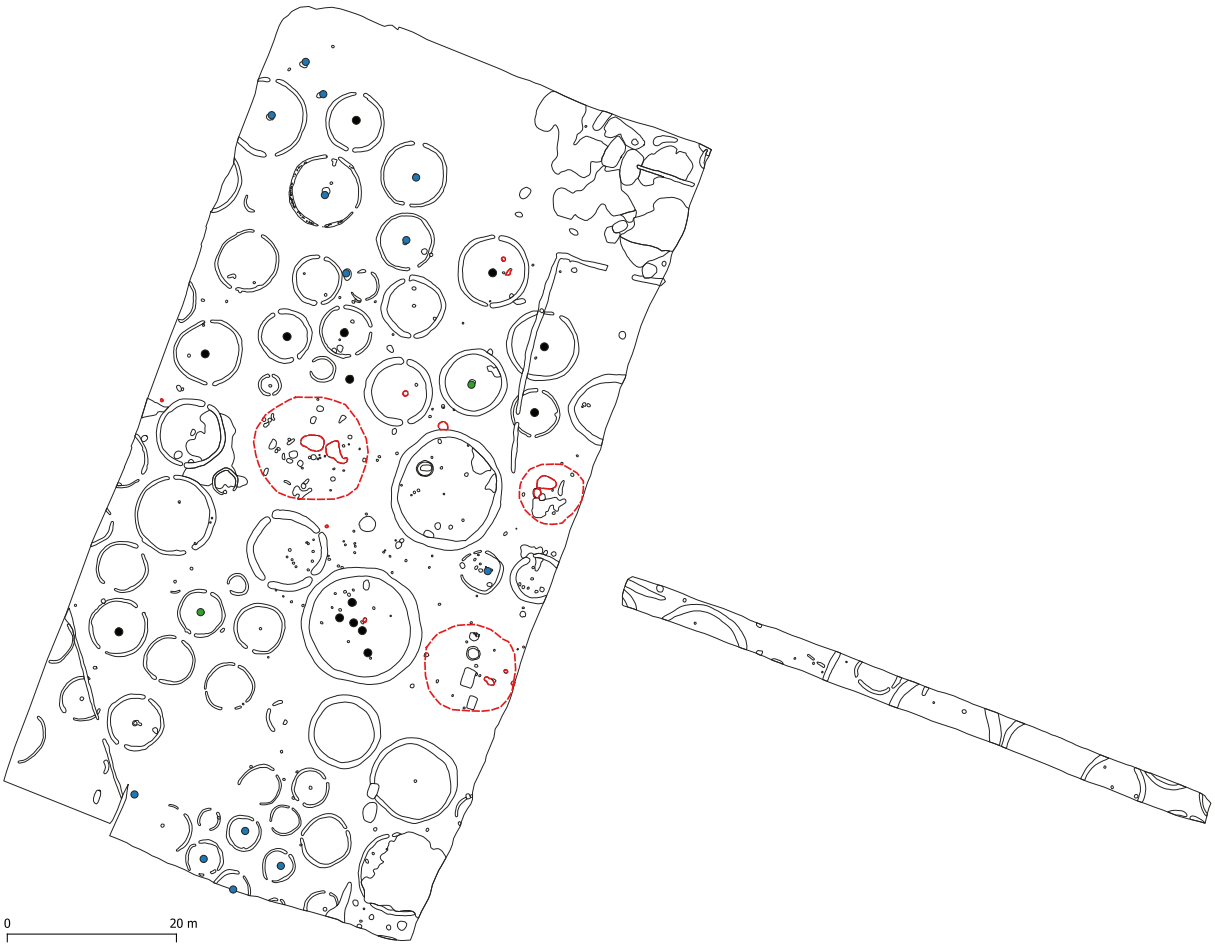


Fig. 4. Billumvad urnfield. Red (dotted) lines: Stone Age features and encircled areas interpreted as three poorly-preserved Stone Age mounds; black dots: vessels with cremated bones (urns); blue: vessels and fragments of vessels without cremated bones; green: cremated bones only (bone-layer graves) (graphics L. B. Frandsen).

can also be dated to the Early Pre-Roman Iron Age. The overall impression is that the site dates to period I of the Pre-Roman Iron Age. One notable exception is a cremation grave with a bronze fibula dated to the Late Roman Iron Age, which falls completely outside the suggested use-period. This grave was found inside the largest circular ditch at the site, which encircled four other cremation graves. The urn was, however, not placed in the centre of the ditch, which indicates that this was a secondary grave incorporated into the monument several hundred years later.

The pits and cremation graves found in the centre of each circular ditch vary greatly with regard to form and preservation, from well-preserved urns to pits with neither burned bone nor fragments of vessels. The lack of osteological analysis prevents us from knowing anything about the gender and age of the people buried at Billumvad. Even though the cremated bones have not been studied intensively, the overall impression is that there is a general lack of cremated bones at the urnfield at Billumvad (Fig. 4: blue dots). It is remarkable that so many centrally placed pits did not contain any cremated bones and also that a large urn (Fig. 5a) contained so few cremated bones.

What did they do with the cremated bones?

Where are the rest of the cremated bones? Were they kept for other rituals or were some of them dug up again and removed? Locating the urn in the centre of the mounds would have been easy. Interpretation of the intrusion into Early Roman Iron Age inhumation graves, documented in many cases,

https://doi.org/10.2369/9783869354439.beyond-urnfields

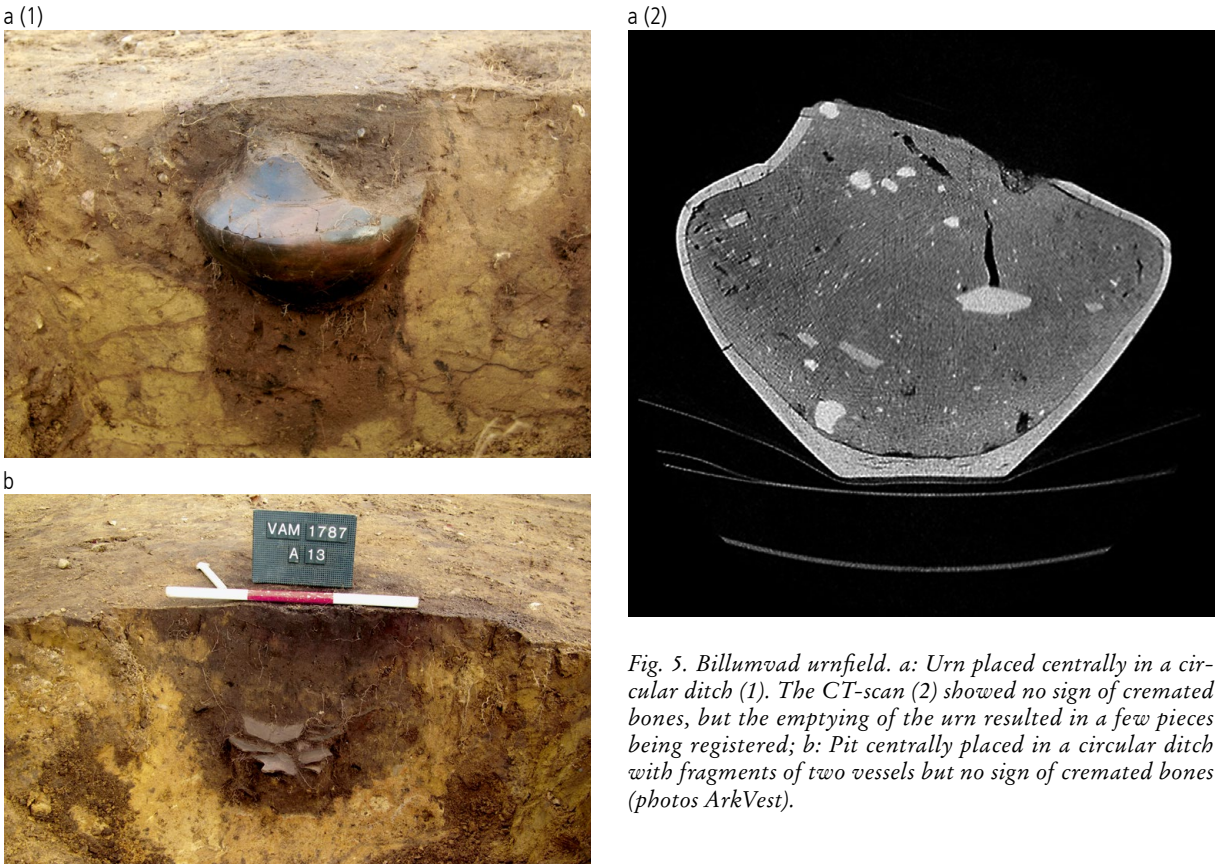


Fig. 5. Billumvad urnfield. a: Urn placed centrally in a circular ditch (1). The CT-scan (2) showed no sign of cremated bones, but the emptying of the urn resulted in a few pieces being registered; b: Pit centrally placed in a circular ditch with fragments of two vessels but no sign of cremated bones (photos ArkVest).

ascribes this to ritual activity rather than to plundering (Lorange 2015; Eriksen/Egeberg 2021). If we take a closer look at the section of the large urn which contained very few pieces of cremated bone (Fig. 5a), it was situated quite deep in the pit and we cannot be certain that the missing neck and rim were ploughed away. An explanation could be that the urn was dug up, emptied of its bones, and maybe the neck and rim broken before it was put back. The same could be the case with two fragmented vessels in a pit (Fig. 5b). These were handled more harshly before the repositioning. The contents of another pit consisted of four vessels and a spindle whorl; these were found in a centrally placed pit within a circular ditch in the northern part of the site. There was no sign of any cremated bones. This might illustrate the same act of reopening a cremation grave, carefully removing the bone remains and either intentionally or accidentally damaging parts of the vessels. It is recommended that attention is paid to traces of Iron Age disturbances, comparable to observations made at Søhale urnfield (Møller et al. 2020, 26).

The role of Billumvad urnfield

Billumvad is not totally excavated, which hinders our understanding of its development. It is obvious that the starting point was the ancient Stone Age mounds and the urnfield then developed in all directions. The strategy for choosing the next point of burial is, however, not clear, but it is possible that the living place or family ties were decisive factors. The gathering at the burial field, when digging the circular ditches and creating the mounds, could carry a meaning beyond burial and the worshipping of ancestors. It was also an opportunity to meet other people, especially if there was a tradition for visiting the place at certain times, e.g. around the half or full moon. The circular ditches seem to have a magical atmosphere. The circle is a powerful symbol, a shape that is found repeatedly throughout prehistory, expressed as stone circles or on rock art and pottery ornamentation, maybe

https://doi.org/10.2369/9783869354439.beyond-urnfields

reflecting the natural world, moon, sun, etc. The ancient conception of time was cyclical; the seasons went in circles, repeating themselves year after year. Perhaps the circle is a physical representation of the boundary between life and death?

The Iron Age people invested a lot of work into digging the circular ditches and creating the mounds. It seems that the circular ditches were left open on purpose. When creating a new ditch, they avoided filling the older ones. The fill from the ditches was most likely used to create the mounds, though the fill from the circular ditches, especially of the larger mounds, did not contain enough material for this purpose (Becker 1961, 164).

Cremation graves and pits with or without pottery are also found in between the circular ditches, but there is no explanation for why some people were buried outside the 'magic circle'. Perhaps they had a weak connection to the local territory, the individual's status did not require their own mound or they were out-casts in some other way. Cooking pits are also found between the circular ditches, which demonstrates that eating or maybe feasting took place there. The funeral gathering is an old tradition and can have many other aspects than just the burial of the dead (Henriksen 2015, 207; Lorange 2015, 31).

Interpretations of newly discovered sites with circular ditches

For a while, some circular formations at Nørholm Hede were interpreted as an urnfield (Møller et al. 2020, 48). A system of circular structures resembling ditches was observed on Denmark's Elevation Model at Nørholm Hede, northeast of Varde, in 2017 and registered as such. Once the location had been spotted, it could also be distinguished on orthophotos. But in 2021, Torben Egeberg at ArkVest discovered that these structures are in fact modern charcoal kilns.[2]

Stokbæk is a newly discovered site that was excavated in connection with the Viking Link power cable in 2020 (Lerke/Andersen 2021).[3] Only weak traces of six circular ditches remained, the smallest measured only 2 m in diameter, the others 4.4–6.6 meters (Fig. 6). Not a single piece of pottery from urns nor any cremated bones remained.

During the same excavation at the site of the Viking Link power cable, another quite interesting location with circular ditches was found at Svinemose, a low-lying wetland area with a subsoil of precipitated pale sand.[4] The preservation was a little better here. The circular ditches were clearly visible in the subsoil, and cross sections show that they have slowly filled up with windblown sand and possibly, intermittently, with water (Fig. 7). There were no remaining signs of burials in the centre of any of the circular ditches. Atypically, there were signs that the ditches at Svinemose might have been maintained by letting some ditches intercut and by the re-digging of the same circle several times. It is not completely clear, but it seems that the inner circle is the oldest and it presumably surrounded a mound, which was later enlarged with a new ditch placed further out than the first one.

The excavation team, Line Lerke and Rachel F. Andersen, do not interpret Svinemose as an urnfield (Lerke/Andersen 2021, 206), but rather compare the site to the circular ditches found at Nørre Rødklit on the Holmsland Klit (Fig. 8), excavated by G. Hatt in 1946 (Hatt 1954). Because of the excellent preservation on the Holmsland Klit, which was covered with sand-drift, it was clear that the circular ditches here enclosed small mounds, but there were no signs of cremation graves buried in the subsoil. This led Hatt to conclude that the circular ditches could not be urnfield enclosures, because

2 Mølholm Hansen 1932, 117 already mentions finds of charred material in the ditches. Surveying there took place in 1922 according to map attachments in the dissertation.

3 Stokbæk J. Nr. ARV 343. Fund og Fortidsminder: 190803-240. Excavated by Line Lerke and Rachel Facius Andersen.

4 Svinemose J. Nr. ARV 343. Fund og fortidsminder: 190802-133. Excavated by Line Lerke and Rachel Facius Andersen.

https://doi.org/10.2369/9783869354439.beyond-urnfields

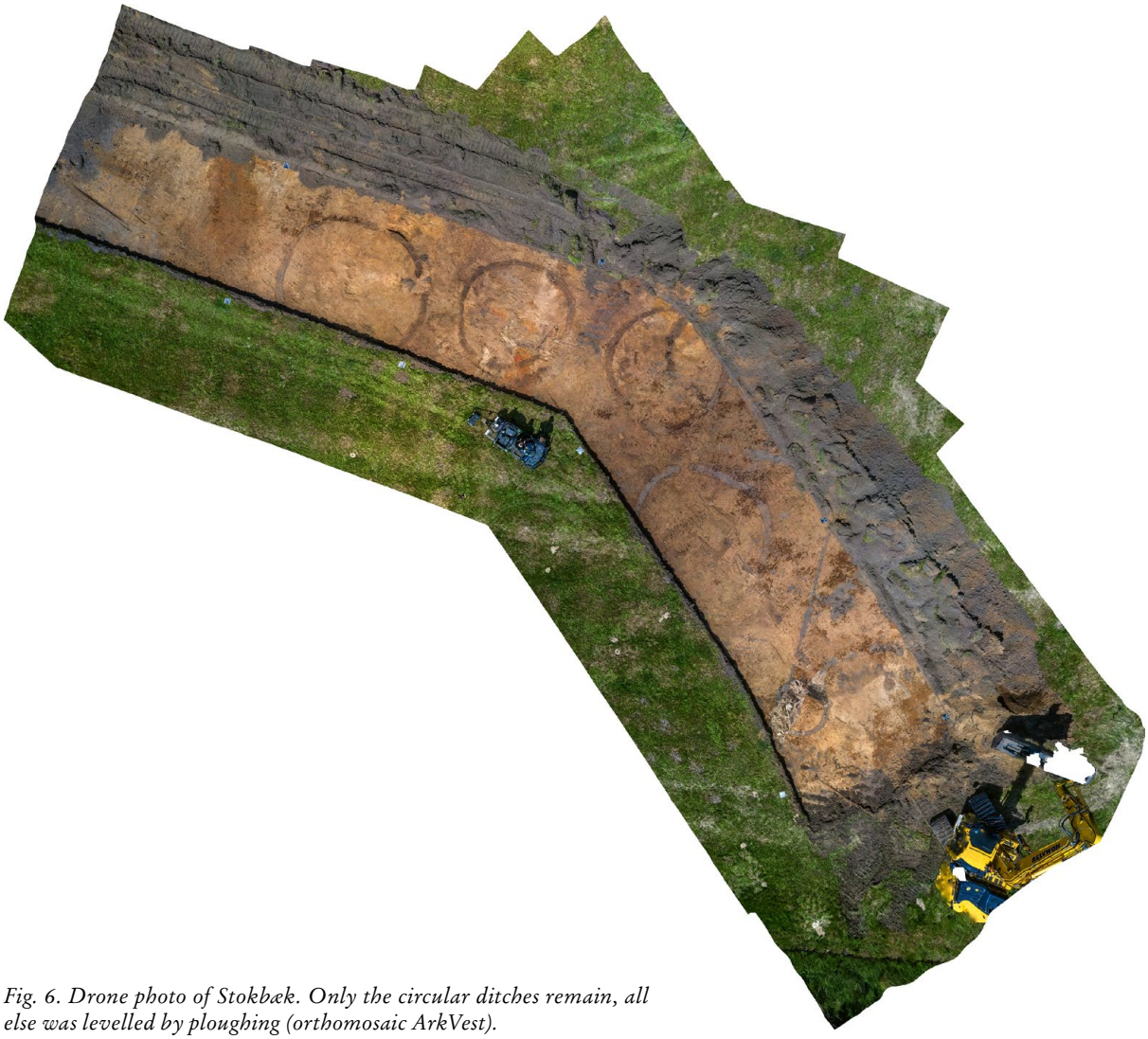


Fig. 6. Drone photo of Stokbæk. Only the circular ditches remain, all else was levelled by ploughing (orthomosaic ArkVest).

there was no sign of cremation graves and because the ditches did not seem to have any connection to each other, and in some parts were remade: 'It looks as if the laying out of a Ring-ditch was a ceremony – the making of something that was similar to a grave, without being a human grave' (Hatt 1954, 23). Hatt's conclusion was made before excavations on other urnfields had shown that there are other explanations for the lack of centrally placed cremation graves (Becker 1961; Lorange 2015; Møller et al. 2020). Urns or graves could have been ploughed away because they were not situated deep enough in the subsoil. Maybe the circular ditch marked a cenotaph – a burial place for a person who died far away or maybe was not even dead yet? The fact is that quite a lot of the circular ditches excavated today have no central grave, and the lack of cremated bones gives rise to speculation among archaeologists. I think it likely that some of the graves have been revisited and some, if not all of the ancestors' cremated bones, have been removed in connection with a ritual action. Svinemose is indeed an interesting site, and further excavations might qualify the lack of graves.

Despite the danger of misinterpretation, as seen in the case of Nørholm Hede, there is a huge potential in the study of aerial photography and LiDAR scans (Olesen/Mauritsen 2015, 64). I think that most of the sites as seen today have been levelled by ploughing and it takes great luck to find a well-preserved urnfield. The best places to look will probably be on remote heathland or maybe under the inland sand dunes near the west coast.

https://doi.org/10.2369/9783869354439.beyond-urnfields

Fig. 7. Aerial view of the circular ditches at Svinemose (photo ArkVest).

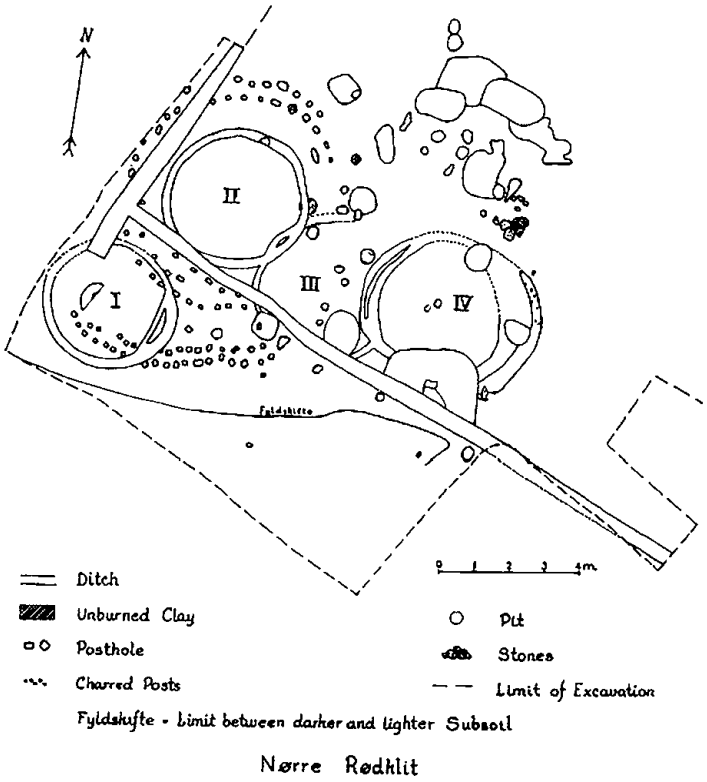


Fig. 8. Traces of circular ditches at Nørre Rødklit (after Hatt 1954, 19).

https://doi.org/10.2369/9783869354439.beyond-urnfields

Bibliography

Becker 1961: C. J. Becker, Førromersk jernalder i Syd- og Midtjylland. Nationalmuseets Skrifter. Større beretninger VI (København 1961).

Eriksen/Egeberg 2021: P. Eriksen/T. Egeberg, Gensyn med de døde fra Hirsemarken. In: R. B. Iversen/S. V. Laursen/N. H. Nielsen (red.), Døden i centrum. Yngre jernalders gravfund i region Midtjylland. Jysk Arkæologisk Selskabs Skrifter 119 (Aarhus 2021) 171–178.

Frandsen 2001: L. B. Frandsen, De stenrige grave i Billum – jordfæstegrave fra ældre romersk jernalder. Mark og Montre 2001. Årbog for Ribe Amts Museer 2001, 19–32.

Frandsen/Westphal 1996: L. B. Frandsen/J. Westphal, De rige kvinder i Billum. Mark og Montre. Årbog for Ribe Amts Museer 1996, 48–53.

Fisker/Andresen 2017: K. B. Fisker/S. T. Andresen, Gravplads med udsigt – de foreløbige resultater fra gravpladsen ved Kærgård. Opdatering 2016. Årbog for Vardemuseerne & Ringkøbing-Skjern Museum 2017, 29–38.

Hatt 1954: G. Hatt, An Early Roman Iron Age Dwelling Site in Holmsland, West Jutland. Acta Archaeologica 24, 1954, 1–25.

Henriksen 2015: M. B. Henriksen, Kenotafer, ødelagte grave eller ofringer? Deponeringer og andre aktiviteter på ældre jernalders gravpladser. In: P. Foss/N. Algreen Møller (red.), De dødes landskab. Grav og gravskik i ældre jernalder i Danmark. Arkæologiske Skrifter 13 (København 2015) 183–214.

Jensen 2005: C. K. Jensen, Kontekstuel kronologi – en revision af det kronologiske grundlag for førromersk jernalder i Sydskandinavien. LAG 7 (Højbjerg 2005).

Lerke/Andersen 2021: L. Lerke/R. C. Andersen, Viking Link, En lang historie. Opdatering 2020. Årbog for Vardemuseerne & Ringkøbing-Skjern Museum 2021, 200–211.

Lorange 2015: T. Lorange, Det sakrale landskab ved Årre. In: P. Foss/N. Algreen Møller (red.), De dødes landskab. Grav og gravskik i ældre jernalder i Danmark. Arkæologiske Skrifter 13 (København 2015) 21–36.

Madsen/Neergaard 1894: A. P. Madsen/C. Neergaard, Jyske Gravpladser fra den førromerske jernalder. Aarbøger for Nordisk Oldkyndighed og Historie 1894, 165–212.

Mølholm Hansen 1932: H. Mølholm Hansen, Nørholm Hede. En formationsstatistisk vegetationsmonografi. Det Kongelige Danske Videnskabernes Selskabs skrifter, Naturvidenskabelig og mathematisk afdeling 9.3 (København 1932).

Møller 2013: N. A. Møller, Dynamiske bebyggelser. Vestjylland i ældre jernalder. Unpubl. PhD dissertation, Københavns Universitet (København 2013).

Møller et al. 2020: N. A. Møller/L. L. Harvig/B. Grundvad, The Iron Age urnfield tradition of southwestern Jutland, Denmark. Acta Archaeologica 91(1), 2020, 11–80.

Olesen/Mauritsen 2015: L. H. Olesen/E. S. Mauritsen, Luftfotoarkæologi i Danmark (Holstebro 2015).

Lene B. Frandsen
Vardemuseerne
Varde
Denmark
lbf@arkvest.dk

https://doi.org/10.2369/9783869354439.beyond-urnfields

Pre-Roman Iron Age cremations in Korsvanggaard, southwestern Denmark – an urnfield with urn graves, cenotaphs and exhumations revealing *pars pro toto* burial rituals

Sarah Skytte Qvistgaard and Bente Grundvad

Keywords: Urnfield, cremation rituals, cenotaphs, exhumations, pars pro toto*, Pre-Roman Iron Age*

Abstract: Forty-six graves from the Pre-Roman Iron Age were excavated in 2020 at the site of Korsvanggaard in St. Darum, between Esbjerg and Ribe.[1] The urn graves were surrounded by circular ditches, which are indications of long-gone small mounds. There were also graves without circular ditches, ring-shaped ditches without graves, cenotaphs, and exhumation graves with indications of pars pro toto *burial rituals. The oldest grave dates to the Pre-Roman Iron Age period I.1a and the youngest one to I.2 –II.1. Two dirt roads or pathways were found on each side of the burial site and are either contemporaneous with the urnfield or were established later, respecting the position of the small mounds. All urnfields in southwest Jutland are presented in map and short catalogue form in this paper.*

Korsvanggaard urnfield

The appearance of urnfields with circular ditches and small mounds in the early Pre-Roman Iron Age reflects a new burial rite in southwestern Jutland. The urnfield at Korsvanggard[2] is the twelfth urnfield found in southwest Jutland within the area of Esbjerg municipality. The site was excavated in 2020, uncovering an area with 46 graves of various types (Figs. 1–2). Korsvanggaard is situated east of St. Darum, a small village between Ribe and Esbjerg. There are no visible or registered Stone or Bronze Age burial mounds in the vicinity.

The rescue excavation, which uncovered 3,273 m², delimited the urnfield to the west. The limits could not be followed further south,[3] due to cultivation and ploughing on the highest point of the area, but the urnfield certainly continued to the northeast. The small mounds were no longer visible

1 In May 2023 another five graves were uncovered and excavated at Korsvanggard. Excavation report: Sydvestjyske Museer, SJM 908_2023. The excavation was due to further expansion of the dairy farm Korsvanggård I/S and was financed by the builder. It was undertaken by Bente Grundvad and Ellen Bekker. Excavation report by B. Grundvad.

2 Excavation report: Sydvestjyske Museer, SJM 908, Korsvanggård Sted nr. 190202-69 FF: 165158. The excavation was due to the expansion of the dairy farm Korsvanggård I/S and was financed by the builder. It was undertaken by Claus Feveile, Sarah Qvistgaard, Troels Bo Jensen and Janne Krøtel. Excavation report by S. Qvistgaard.

3 In 2007, the trial excavation ASR 2227 was undertaken just south of the area; no finds or features were discovered. In 2003, the trial excavation ASR 1793 was undertaken 85–125 m southwest of the urnfield; no finds or features were discovered.

https://doi.org/10.2369/9783869354439.beyond-urnfields

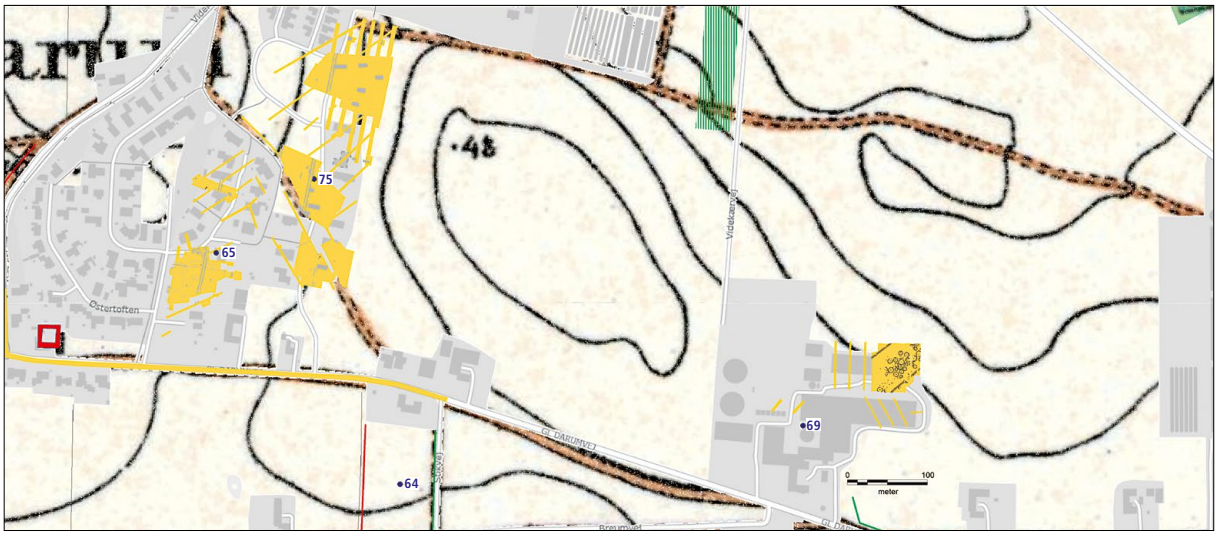


Fig. 1. Overview of Korsvanggård urnfield in the east of the mapped area; to the west the excavations of the Pre-Roman Iron Age settlement in Østertoften, St. Darum. Background map of 'Høje målebordsblade' *from 1842–1899 with current state of modern buildings. Numbers refer to local sb-numbers* (sognebeskrivelse *[parish descriptions]) in the map area of 190202 (graphics Sydvestjyske Museer).*

Fig. 2. Korsvanggård urnfield during excavation, with grave 30 up front in the middle. View from the northeast (photo Sydvestjyske Museer).

in the landscape during excavation, and the outline of the mounds could only be observed because of traces of the circular ditches in the subsoil. The state of the urns made it clear that the preservation of the rest of the urnfield is in danger due to the cultivation of the land. Most urns were excavated, wrapped in cellophane and brought to the museum, where they were carefully emptied; some of them with additional wet sieving with a 2-mm-net to protect the fragile burned bone remains during the process.

https://doi.org/10.2369/9783869354439.beyond-urnfields

The landscape around Korsvanggaard

The Iron Age mounds in the urnfields often relate to older mounds or roads that led to the burial site as, for example, at Aarre, Søhale, and Aarupgaard. The Korsvanggaard burials are somewhat atypical, since there are no such mounds known in the vicinity of this urnfield and none have been registered on older maps, if there were ever any.

The Korsvanggaard urnfield is bordered by pathways/dirt roads running southwest-northeast. These consist of wheel tracks, 30–40 cm wide and 5 cm deep, which are believed to be contemporaneous with the urnfield or a little later, as the tracks respected the graves. The two roads appear to be enclosing the urnfield, allowing it a maximum width of 45 m.

If we let the roads continue in a straight line through the landscape, they reach the Kjærfenne bog, where a bronze neck ring[4] dating to the Pre-Roman Iron Age was found in 1903 during peat digging. Already in 1884, the slope towards the peat digging site had revealed[5] a settlement from the Pre-Roman Iron Age, situated close by at Breum banke. Here, at least one house had been burned down.[6] Breum banke is also the location of the 'Darum find' with 13 gold bracteates discovered in 1884.

Seven hundred meters west of Korsvanggaard, the contemporaneous settlement of Østertoften[7] with eight houses and groups of pits containing pottery dating to the Early Pre-Roman Iron Age was excavated. Perhaps these inhabitants made use of the documented roads as well. The Korsvanggaard roads towards the northeast can potentially have led to the group of mounds[8] named Fladhøj, meaning 'flat mound', 2 km away. The roads are yet undated and may be much younger and therefore just bypass the mounds.

The graves

A total of 46 graves of various types were found at Korsvanggard in 2020 (Fig. 3). The majority (n = 29) of the burials were central graves within a circular ditch. It is likely that more graves were covered by a mound and had circular ditches once, but these features no longer exist due to cultivation. The total number of original mounds is hard to estimate. Some urn graves were placed in narrow gaps between circular ditches with no further space for their own mounds. The circular ditches never overlapped.

Out of the 46 graves, 29 had preserved circular ditches, but only in eight graves an urn grave was found within circular ditches. Another eight *traditional* urn graves are (presently) without ditches, whereas four might have had the circular ditches that are no longer preserved, and the other four urn graves were tucked in between mounds, with no room for their own mounds. Fifteen graves are interpreted as dug-up urn graves and are now seen as exhumations, of which 12 were within circular ditches and three are (presently) without, most likely because they were placed in areas that would be the most cultivated. Nine graves are interpreted as cenotaphs with empty urns, of which three were still within circular ditches.

Six graves had insufficient evidence of urns or cremations – three circular ditches contained no grave, either because it was never there, was too shallow, or was not preserved due to cultivation.

4 Bronze neck ring, sb. no. 190202-3 (kulturarv.dk). Nationalmuseet inv. no. 259/03.

5 In many places, the slope towards the bog yielded 'burnt bones/ashes with pots' *(mange steder i skrænten ned mod mosen fandtes 'brandpletter med potter')*: Nationalmuseet, inv. no. 259/03.

6 Breum banke, ASR 71/66.

7 Østertoften I, ASR 1710; Østertoften II, ASR 1921.

8 Mounds around Fladhøj, St. Darum, sb. no. 190202-5 (kulturarv.dk).

https://doi.org/10.2369/9783869354439.beyond-urnfields

Fig. 3. Korsvanggård urnfield with its 46 graves – different types of graves. Green: Urn graves with cremated bones; blue: Cenotaphs with just the empty vessel; pink: Exhumations with empty grave pits (graphics Sydvestjyske Museer).

Two circular ditches had the central grave situated beyond the excavation area. One grave contained a vessel and was without a circular ditch but was not investigated any further.

The urns

The ceramic material consists of the remains of 42 vessels from 16 urn graves and nine cenotaphs (Figs. 4–6). In the exhumation graves, sometimes a few potsherds have been left behind. From all the graves found at Korsvanggaard, only two vessels were intact: one urn and one small accessory vessel.

Most of the rims were destroyed by ploughing, but in some cases the rim had fallen into the vessel due to the pressure of the soil. The rest of the urns had only their lower parts preserved. In cases where the urns were preserved to a higher degree, the vessels had a smoothly curved body profile, and the widest point tended to be at the upper part before the narrower neck and rim. The rims of the vessels are either thin and straight (period I), or thickened and faceted (period II; Jensen 2005). None

https://doi.org/10.2369/9783869354439.beyond-urnfields

Fig. 4. Korsvanggård urnfield. Grave 1, urn (x22). The only urn found intact but pressed out of shape. Notice the rim on the edge (photo Sydvestjyske Museer).

Fig. 5. Korsvanggård urnfield. Grave 1, accessory vessel (x70), placed directly on the bottom layer of cremated bones (x71) (photo Sydvestjyske Museer).

Fig. 6. Korsvanggård urnfield. Grave 3, example of collapsed urn (x12) destroyed by ploughing (photo Sydvestjyske Museer).

of the urns were decorated, and they represent most likely pottery for everyday use, re-used as urns. Secondary vessels were found inside the urn in two cases.

The grave goods

Just as the urns were badly preserved, so were the grave goods found in eight out of 46 graves. There was a very limited range of items which had not been on the pyre as the metal had not been deformed in any way by fire. In two cases, the grave goods consisted of different pieces from a belt, and in another case the grave contained a belt hook and a dress pin. In five cases, there was only one dress pin present in the grave. These include a fragmented iron coiled-head pin, dated to period I.1a–I.2a (Jensen 2005: pin type 1), a fragmented iron nail-head pin dated to period I.1–I.2 (Jensen 2005: pin type 20), and an intact iron pin with a grooved head dating to period I.2–II.1a (Jensen 2005). In two cases, the dress pin was made of bronze. From the in-depth investigations carried out at Søhale urnfield (Møller et al. 2020), we know that belt hooks are often found in women's graves (Møller et al. 2020, 37). Concerning the Søhale urns, those containing one pin often represented female graves, whereas the ones that contained two or three pins represented male burials (Møller et al. 2020, 37).

https://doi.org/10.2369/9783869354439.beyond-urnfields

At the moment, this trend can neither be proved nor disproved at Korsvanggaard because the cremated bones have not yet been analysed.

Spatial layout and dating

As observed at many of the larger urnfields, such as Aarupgaard, the graves were placed in a linear sequence without any intercutting of the 21 circular ditches (Jensen 2005, 97; Terkildsen 2015; Møller et al. 2020). The small number of metal objects found in the urns and the poor state of preservation of the vessels only allow a loose interpretation of the development of the urnfield at Korsvanggaard. The diameter of the circular ditches varies from 4 to 8.3 m and, usually, there were two openings in the circular ditches, which were situated approximately towards the north and the south. Grave 30 is interpreted as the oldest grave at the site; its circular ditch had a single 1.7-m-wide opening to the north. This ditch is also the largest at the site, with a diameter of 8.3 m and a width of 1 m; it contained a large number of deliberately placed head-sized stones. From other urnfields, such as Aarre and Aarupgaard, it is known that the irregular and large circular ditches are among the earliest burials (Lorange 2015, 26). The few potsherds from the urn are dated to the early Pre-Roman Iron Age. Two small sherds display a thin, vertical rim but, as the burial has been exhumed, no additional knowledge can be derived from any possible grave goods. With this information and the dating of the ceramic urn, grave 30 has been dated to Pre-Roman Iron Age period I.1a (*c.* 400 BC). It is believed that grave 30 was the first grave at the urnfield and that the layout of the rest of the urnfield was based on this (Fig. 7).

There were three graves from period I.1b–1.2a: graves 1, 22, and 25. Graves 22 and 25 both contained belt hooks and urns with thin, flared necks. Graves 1 and 25 contained pins – one was a bronze pin and the other one a nail-head pin. The nail-head pin dates grave 1 to period I.I–I.2, although it could also have been an older artefact at the time of burial. Grave 1 also contained a small secondary cup that was *c.* 6.3 cm high. From period I.2a onwards, all the circular ditches have two entrances pointing south and north. Compared to the previous period, the circular ditches now became more regular, smaller and narrower.

Eight graves are dated to Pre-Roman Iron Age period I.2 (graves 2, 16, 18, 19, 20, 26, 29, 44). One of them, grave 44, contained an urn with a thin, flared rim and a band-shaped handle as well as a belt hook, both of which can be dated to the late Pre-Roman Iron Age. Eleven graves are dated to period I.2–II.1 (graves 14, 17, 21, 24, 27, 28, 34, 36, 37, 38, 45). The dating of the graves is mainly based on the grave goods, as the preservation of the urns is too poor to use them for this purpose.

Burial rituals and *pars pro toto*

Although most of our knowledge about Iron Age burial customs derives from archaeological investigation, the thoughts behind the burial rituals are not visible in the archaeological records. The first step of the burial rituals visible in the archaeological record was the placing of the deceased on a pyre. After cremation the bones were carefully selected from the pyre debris (dirt, charcoal), and therefore there are only few remains of pyre debris in the burials. This seems to have been a common practice and is also seen at, for example, Søhale urnfield (Møller et al. 2020, 29). Some of the undisturbed urn graves at Korsvanggaard appear to contain only a selection of bones, based on the small number of cremated bone remains. No anthropological assessment or analyses have been made so far.

The cremated bones were placed in the urn, with the grave goods placed on top of these, which is a positioning also observed in burials at Aarre (Lorange 2015, 22–23) and Søhale (Møller et al. 2020, 56).

https://doi.org/10.2369/9783869354439.beyond-urnfields

Fig. 7. Korsvanggård urnfield; chronology of burials. The graves are numbered from southwest to northeast, but with urn graves, tucked in between mounds, numbered last. Pre-Roman Iron Age (I/II) – grey; Early Pre-Roman Iron Age: I.1a – blue (Grave 30); I.1–1.2 – petrol; I.2 – green; Transition Early/Late Pre-Roman Iron Age (I.2–II.1) – orange; Late Pre-Roman Iron Age (II) – yellow (graphics Sydvestjyske Museer).

The dress pins and belt hooks must have been removed from the clothes of the deceased before cremation as none of the metal objects were affected by fire.

The comparison of observations from the Funen urn cemeteries with ethnographic descriptions of, for example, Hindu rituals in connection with cremations from Bali suggests that the most central part of the burial ceremonies were the processes around the cremation and the arranging of the pyre, and not the depositing of pyre remains and grave goods in the grave (Henriksen 2015, 184, 206). This also corresponds to our earlier suggestion that only a selection of the cremated bones and personal belongings were buried.

https://doi.org/10.2369/9783869354439.beyond-urnfields

The mounds that contain a central grave with an urn but no cremated bones or grave goods are interpreted as cenotaphs. Korsvanggaard contained nine such cenotaphs, so a significant amount of burials there did not contain any burnt bones, which is a considerable proportion of the total number of graves. Three cenotaphs (graves 27, 29, 37) had circular ditches and were placed in the northeastern part of the urnfield. The cenotaph interpretation derives from Becker's description of empty vessels found in several mounds from the early Pre-Roman Iron Age in southwest Jutland (Becker 1961, 167). The empty graves in the urnfields are often seen as substitutes for urn graves, perhaps for somebody who died away from home or as a symbolic grave of a 'foreign' individual. Becker suggests, concerning the cenotaphs, that 'presumably the normal procedure at the urnfield is to first build the mound and then – perhaps several years later – dig down to place the central urn grave in it' (Becker 1961, 167). This might explain urnfield graves in which no urns, bones or grave pits were found in the centre of the mound. Based on Aage Brusendorff's observations from 1913 on the urnfield at Jernvedlund, Møller states that the narrow burial shaft for the urn can be followed down through the fill of the small burial mound, so that in some cases the mound seems to have been built before the burial (Møller 2013, 104–105). Jørgensen (1975, 8), however, does not believe that the urns were dug through the mound. He argues that the shaft is due to convergence after the possible wooden lid of the urn decayed. If this is the case, then the empty mounds must certainly be cenotaphs.

The reasons the urns were placed in the mound without cremated bones can only be speculated about, and there have been many possible explanations (e.g. Møller et al. 2020, 57). We find the most reasonable interpretation to be that a cenotaph is a substitute for an urn grave, in cases where it was not possible to bury the deceased as tradition otherwise dictated. An accessory vessel was placed in three of the cenotaphs, possibly as a form of *pars pro toto* of the absent deceased. This will be discussed further below. The classification of exhumation activities of urn graves and cenotaphs at Korsvanggard are not just examples of poor preservation, because at the bottom of the vessels, the rim and neck were often seen collapsed inwards into the empty vessel, which was free of soil, with no traces of either bones or grave goods. A lot of the graves proved to be intentionally empty, a phenomenon which is also known from the urnfield at Billumvad, close to Oksbøl and Varde (see Frandsen, this volume).

Fifteen graves at Korsvanggaard were exhumed shortly after burial, and 12 of these were within a mound with a circular ditch. Three were without a mound and situated in a heavily cultivated area, but so close to other graves that not all of them can originally have had space for a mound. The re-dug pit is often oval-shaped at the surface and a little larger than the grave pits of the undisturbed urns and cenotaphs. It is evident that the exhumation was a deliberately performed act by someone who knew exactly where to locate the urn. The exhumed graves can be divided into three different groups – graves that were completely emptied (graves 5, 7, 38), graves where a few pottery sherds had been left behind (graves 13, 15, 19, 36), and graves where a few pottery sherds and cremated bones were left behind (graves 9, 14, 16, 18, 20, 26, 30, 34). In the graves where a few bones and pottery sherds were left behind, it is believed that they were either left by accident or deliberately placed as a *pars pro toto*. The exhumed graves are scattered throughout the urnfield, but with a concentration in its central part. Grave 30 had been exhumed, too, making the exhumation practice a consistent burial ritual throughout the urnfield's use-life.

Graves without bone remains are a common phenomenon in Pre-Roman Iron Age urnfields, and possible explanations for the high number of exhumed graves and cenotaphs have been discussed by many researchers (Becker 1961; Jørgensen 1975; Møller et al. 2020). Jørgensen (1975, 8) suggests that the lack of bones indicates child burials, where the tiny bones were completely consumed by the fire, Becker (1961, 168–169), on the other hand, proposes that the high number of Pre-Roman Iron Age cenotaphs is due to a catastrophe that resulted in a high number of memorial cenotaphs,

https://doi.org/10.2369/9783869354439.beyond-urnfields

whereas Møller et al. (2020, 57) suggest that because the settlement starts to cluster in coastal areas in periods I.2 and II.1, the empty burials may be 'the result of a more frequent curation of the bones from recently deceased and buried ancestors'. Another approach is to look at cultures that practise comparable burial rites today, such as some communities in northern Vietnam where exhumation is believed to allow the soul of the deceased to enter the afterlife. The bones are assumed to shelter the soul and spirit and, in order to enter the afterlife, the bones must be reburied in a suitable tomb. The exhumation usually takes place three to four years after the burial (Seah/Nair 1996, 70). A similar way of thinking and handling the cremated bones by Iron Age people is possible and would explain the high number of empty graves at Korsvanggaard.

Pars pro toto in cenotaphs and in exhumations

Accessory vessels

There are many unknown elements of the burial rituals that took place at the urnfield sites. One group of objects to consider is that of the relatively common accessory vessels that were placed in the urns or as the main vessels in the cenotaphs. These could represent personal belongings and were therefore placed in the grave. At Korsvanggaard, accessory vessels were found in four graves in the western part of the urnfield – urn grave 1 and cenotaph graves 4, 6 and 43. The three cenotaphs did not have circular ditches, which indicates they were part of the later phase at Korsvanggaard, although it cannot be ruled out that the ditches were destroyed by cultivation. A similar trend has been observed at Aarupgaard urnfield, where miniature and accessory vessels rarely occur in the earlier phases, but are more common in the later phase (Terkildsen 2015, 65).

Was the purpose of the deposition and the placing of an accessory vessel, perhaps containing an alcoholic beverage, in the grave a way of offering a toast, as a last farewell? There is no reason to believe that the accessory vessel in grave 1 was a *pars pro toto*, since the cremated bones and the grave goods were all there. But maybe the carefully placed accessory vessel on top of it all, which was found still standing upright and which held no pieces of burnt bones, could have contained the very last drink in honour of the deceased for future well-being in the hereafter. This could very likely be the case for the three accessory vessels in the three cenotaphs as well.

In Oosterhout, a contemporaneous Dutch site, the osteological analysis of the cremated human remains from miniature urns and accessory vessels, found inside larger urns, showed that they only contained a small selection of cremated bones. A high number of the urns there seem to contain accessory vessels. The authors state: 'These small urns are an excellent example of a *pars pro toto* ritual, which is performed in various cultures through time' (Veselka/Lemmers 2014, 151). The concept of *pars pro toto* burial rituals is that part of something (part of an object or part of a human being) could be seen as substituting or representing something larger (the complete object or even the complete individual). In the Dutch area, there are urns with miniature vessels or with accessory vessels placed in larger vessels comparable to those at the Danish urnfields. Placing an accessory vessel into a larger cremation urn has been established as an example of the *pars pro toto* ritual, where an object can take the place of something else. In this case, a selection of bones represents the complete deceased individual. In the three cenotaphs at Korsvanggaard, the accessory vessels may represent the last toast in the burial ritual; a sort of *pars pro toto* in honour of the alleged deceased who was absent. This sometimes also goes for the funeral wake, whether the deceased was actually buried or not.

Sacred 'white' stones

More examples of the *pars pro toto* burial ritual are evident at Korsvanggaard urnfield in some of the exhumated urn graves. In four instances – graves 14, 19, 20, and 34 – the urn has been exhumed and

https://doi.org/10.2369/9783869354439.beyond-urnfields

a white or light-coloured stone deposited in its place, thereby representing a *pars pro toto* ritual. In the re-dug grave pits in graves 19, 20, and 34, a whitish stone was present in the fill. The stones were smooth, water-rolled beach stones of granite or gneiss and thus not naturally occurring at this location. Grave 14 consisted of a well-preserved circular ditch with a central grave pit, perhaps slightly larger than ordinary urn pits. The pit held only a very few burned bones and small pieces of pottery towards the bottom of the feature. The re-entering of the feature showed that the grave had probably been exhumed shortly after the burial took place, as the later pit was right on top of the grave pit (Fig. 8). A white quartz stone was deliberately deposited in the grave as a *pars pro toto*, similar to the many whitish stones found in contemporaneous sacrificial sites in south Scandinavian bogs, some of which have been interpreted as fertility sacrifices as, for example, at Käringsjön, Forlev Nymølle, Salpetermosen, and Svennum (Carlie 1998; Lund 2002, 184; Pantmann 2020; Wåhlin in print). Stones are scarce in the vicinity of Korsvanggaard, and the few naturally occurring rocks are irregular boulders from quaternary glaciation in the area of St. Darum and Ribe in the sandy lowlands of the North Sea basin. Quartz – and other stones – are not so commonly found. Nor are these stones naturally occurring in bogs, meaning that they are deposited intentionally by humans. Pantmann proves the use and importance of white and light-coloured stones, which were deposited foremost in the wetlands of Salpetermosen, Syd, and Gørløsegård, but are also seen in all aspects of life during the pre-Roman Iron Age and continuing throughout the rest of the Iron Age. The stones are carefully selected precisely because of their bright expression, which should probably be seen as part of their sacral function and part of their orchestration (Pantmann 2020, 67–68, 81). The Svennum bog excavations have revealed ritual offerings of light-coloured stones, pottery, animal bones and six human crania.

Wåhlin states that the light-coloured stones were intentionally deposited as sacrificial offerings in themselves (Wåhlin in print). Quartz is known to have a special meaning in graves. In three Bronze Age burial mounds at Kårarp in Sweden, approx. 3.5 km from Käringsjön, graves packed with quartz have been identified, and 130 pieces of quartz have been found in an early Iron Age burial mound at Fröböke in Halland. Carlie suggests that whitish stones were of sacred significance, and it is in this

Fig. 8. Korsvanggård urnfield. Grave 14, placed in the center of a well-preserved circular ditch. The grave pit only contained a few pottery sherds and a quartz stone (photo Sydvestjyske Museer).

https://doi.org/10.2369/9783869354439.beyond-urnfields

perspective that one must understand them in both grave and wetland context (Carlie 1998, 23–24; 1999, 49). White stones were regarded as sacred or magical by people from the Pre-Roman and Roman Iron Age periods, according to Carlie (1999), based on the position of quartz built into grave monuments in Tiraholm, southwest Småland. She interprets the stones as traces of rituals, in connection with the consecration of the burial site as a sacred ground (Carlie 1999, 48). 'Most likely, the white color was a symbol of the superior divine and cosmological forces in existence. Judging from the archaeological sources, the sacred power of whiteness was particularly effective in connection with cults of the dead. There is a great deal to indicate that the white color was used in funeral rituals, because of its internal power to guarantee the prevailing cosmology, with the continuance of life and rebirth of the dead, or passage to another world. It is in this perspective, I believe, we should understand the use of white stones in Iron Age burial tradition' (Carlie 1999, 57). Småland is quite some distance away from the urnfields discussed in this volume, but perhaps the religious beliefs were not. The view of the sacred and the magical may very well be the same and, therefore, the whitish stones in the Korsvanggaard exhumations are of significant value in a burial ritual.

As an ethnographical analogy – perhaps too far-fetched – there is a *pars pro toto* ritual among the Chukchi people, a group of indigenous reindeer herders in northern Kamchatka, Siberia, Russia, where, when making a sacrifice, a stone may be a substitute for the beast to be killed. In this case, the substituted stone must be stabbed with a knife to represent the actual slaughter of, for example, a reindeer. Other objects can be substitutes in the Chukchi ritual sacrifice, but the stone is left as the last alternative (Willerslev 2013, 145). Willerslev points out a trickery of the *pars pro toto:* 'The chain ends with the minimally acceptable substitute: A stone. The troubling fact, however, is that the value hierarchy of substitutes is shadowed by its contrary, so that in a certain sense, the lowest is also considered the highest' (Willerslev 2013, 145). The Chukchi thus have a *pars pro toto* use of stones in sacrificial rituals that are not immediately comparable to burial rituals. Nonetheless, it is quite interesting that the stone can take the place of a human. The substitute stone in the Chukchi sacrificial ritual can not only mean the slaughtered beast but actually also the human being: '[…] human sacrifice is always accompanied by the sacrifice of the victims of the lowest worth, such as the killing of a wooden reindeer or stone. The Chukchi even say that the lowest substitute in the chain, the stone, is in certain ways the equal of the highest victim, the human being' (Willerslev 2013, 150).

We accept the premise that a white stone can become sacred and can be part of a *pars pro toto* burial ritual because the whitish stones occur in this special context, where they cannot have been deposited by freak coincidence given they are not of common occurrence in the area. We suggest that the whitish stones in the exhumations are *pars pro toto* objects that substitute the urn containing the deceased. It is our impression that perhaps these particular bright, whitish stones have indeed become sacred and do replace either the white bones and/or the human being as a person. We interpret the re-dug urns as exhumations. But what was the reason for this and what happened afterwards?

Did the exhumed human remains serve a purpose, and were they/where were they reburied? Was it a disgrace to be exhumed by plundering and removal from what was perhaps intended as an eternal resting place? Or was the exhumation of the urns seen as a necessary part of a reburial for the family and descendants when moving to another locality or tradition? If a reburial is in order to allow the soul of the deceased to enter the afterlife, why were only a selection of the urn graves exhumated for possible reburial?

Conclusion

New excavations of urnfields prove to be important, even though the graves are not so well preserved as they were in the 19th century and the following years. More information is to be derived because

https://doi.org/10.2369/9783869354439.beyond-urnfields

recent investigations show a much higher number of cenotaphs and exhumations compared to the urnfields that were excavated and published earlier. This is most likely due to the more accurate registration of traces of burial rituals and empty graves, whether they are exhumated urns or cenotaphs, which will serve as important evidence of complex burial customs in the Pre-Roman Iron Age. It will be important to look for whitish stones in special contexts in all excavations from the Pre-Roman Iron Age, so the overall rites can be better understood, whether in burial customs or ritual offerings in wetlands and settlements.

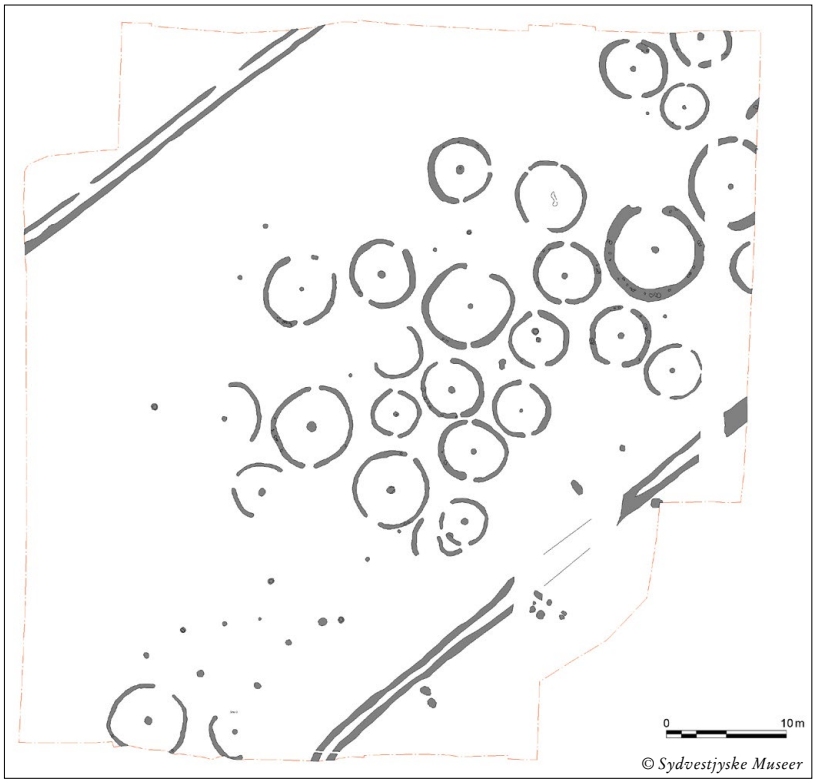
The traditional urnfield grave with a small mound, a circular ditch and an urn with cremated bones only occurs in 16 out of 46 cases of burial at Korsvanggaard. In contrast, the number of empty graves is high – there are 15 exhumations and nine cenotaphs, most of which have been covered by mounds.

The small accessory vessel sometimes placed within the larger vessel in the cenotaphs could be seen as the last time someone offered a toast for the deceased person, or perhaps as a *pars pro toto*. No information about the deceased can be derived from the cenotaphs, and the same is true for graves that had been exhumed, unless a specific piece of burnt bone has been left as a *pars pro toto*.

It is highly important to document all traits of the graves well, even though they might not contain grave goods and even though it might not be possible to assess the whole urnfield. Future investigations can be fruitful before the urnfields are ultimately destroyed by cultivation.

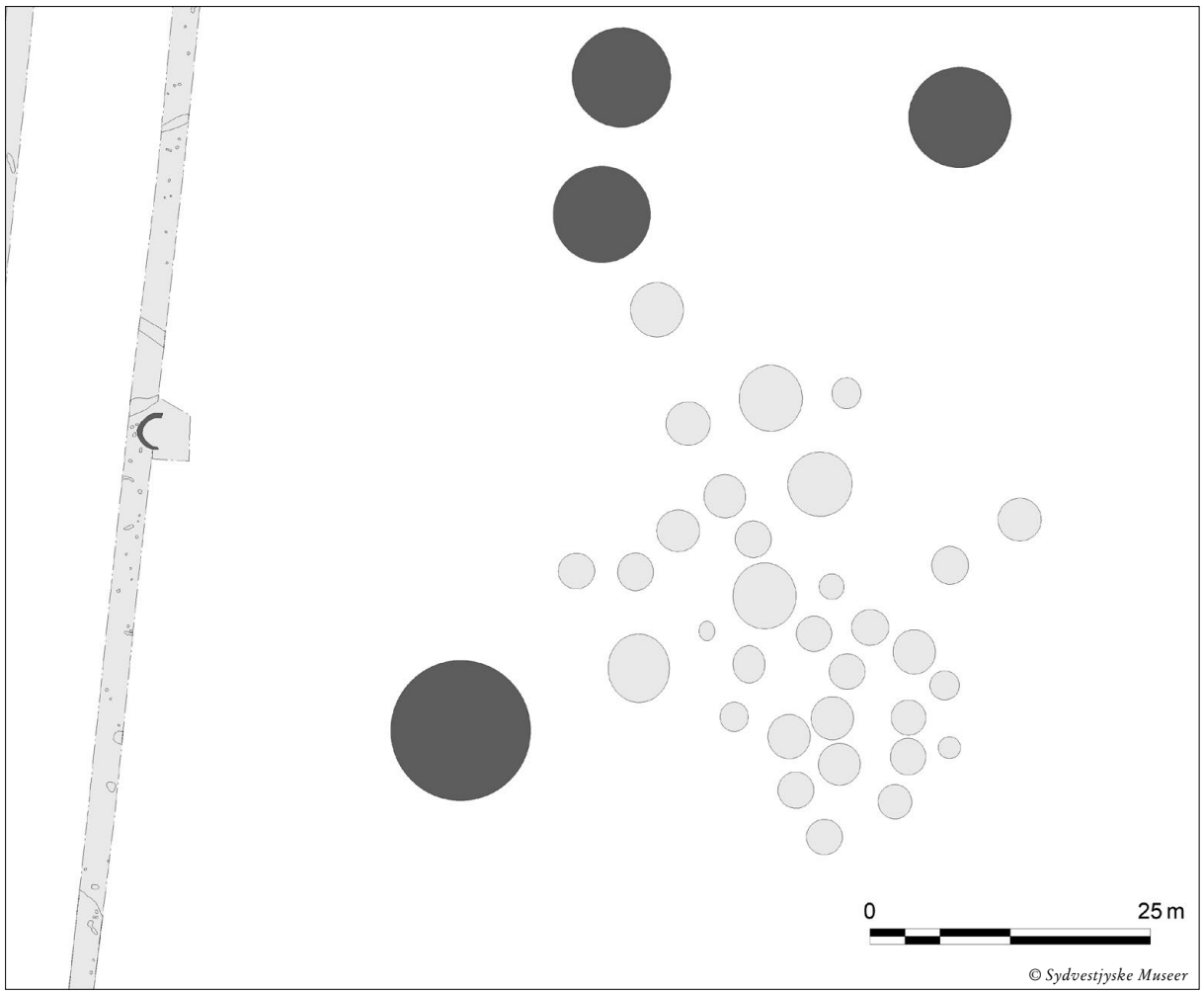
Catalogue of urnfields in southwest Jutland

Korsvanggaard
Sydvestjyske Museer, inv. no.: SJM 908
Year of excavation: 2020; 2023
Number of graves: 46 (+ 5 excavated in 2023)
Older mounds: None



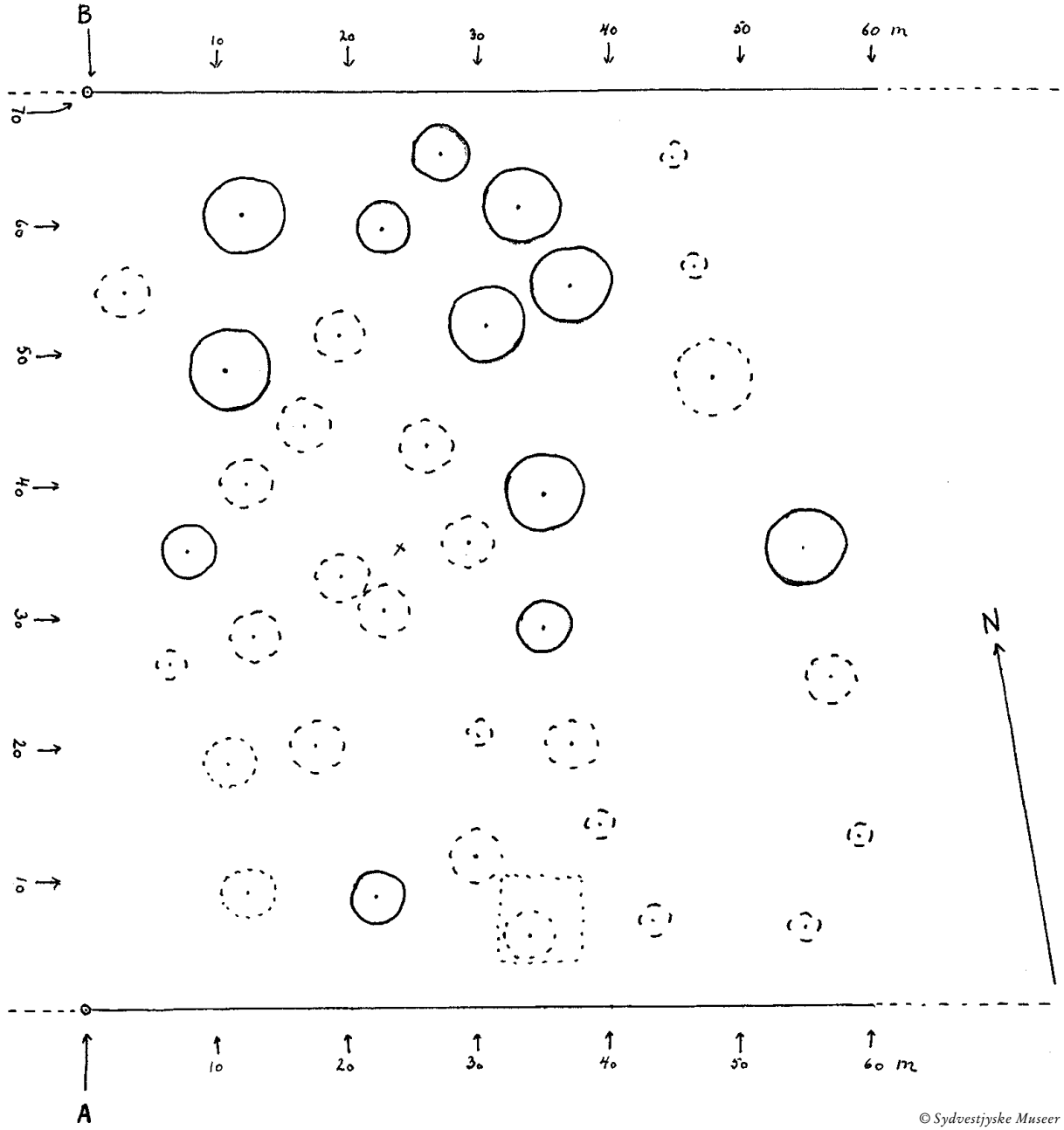
https://doi.org/10.2369/9783869354439.beyond-urnfields

Jernvedlund
Nationalmuseet, inv. no.: NM 538/13; Sydvestjyske Museer, inv. no.: SJM 213
Year of excavation: 1913; 2013
Number of graves: 35
Older mounds: 5
References: Hansen 1998, 125; Møller 2013; Møller et al. 2020, 71



https://doi.org/10.2369/9783869354439.beyond-urnfields

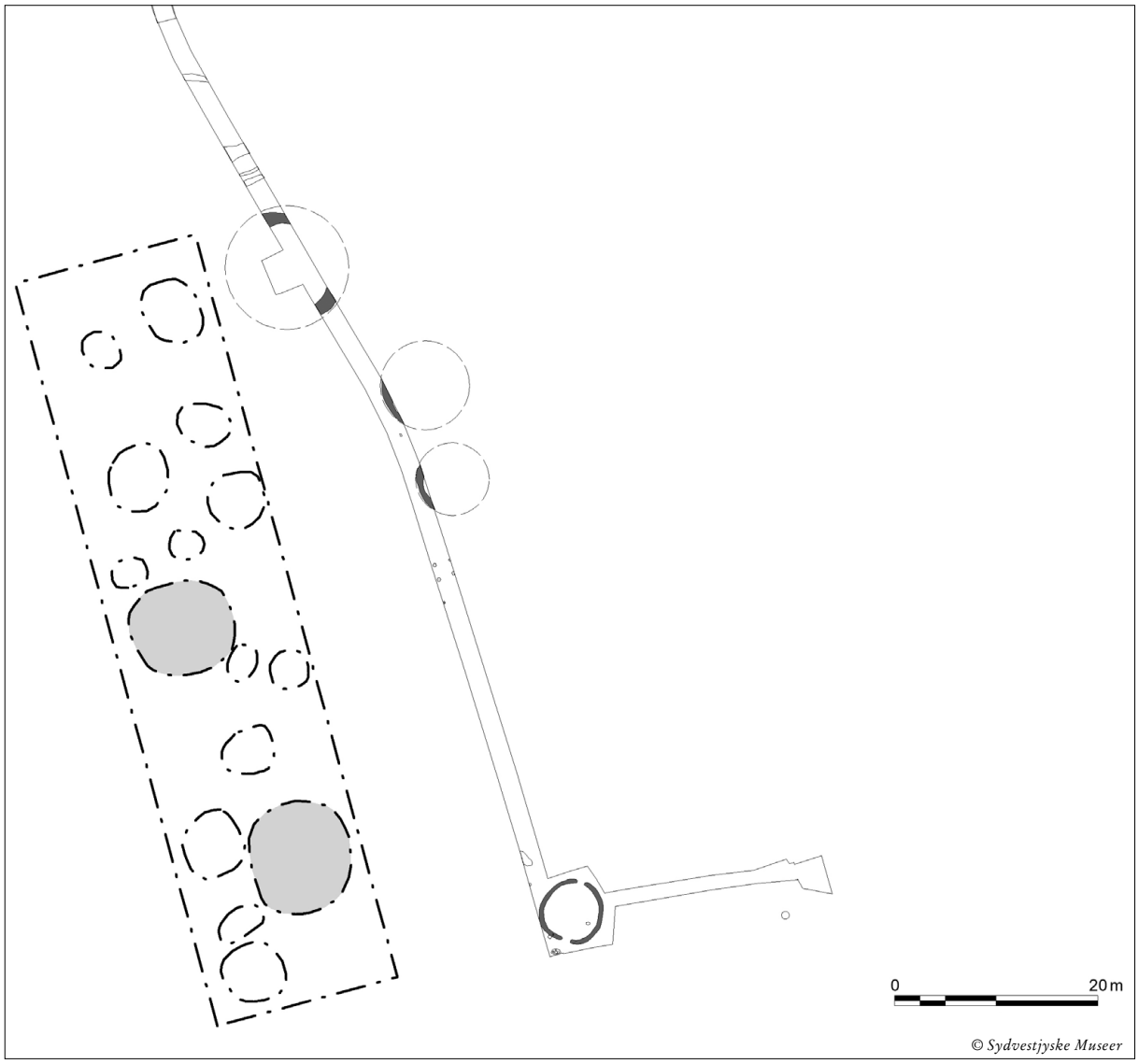
Krogsgaard Mark
Esbjerg Museum, inv. no.: ESM M6 54
Year of excavation: 1955
Number of graves: 36
Older mounds: No known ones



© Sydvestjyske Museer

https://doi.org/10.2369/9783869354439.beyond-urnfields

Den hemmelige Skov, Kjersing
Esbjerg Museum, inv. no.: ESM 865; Sydvestjyske Museer, inv. no.: SJM 510
Year of excavation: 1935; 2015
Number of graves: 17
Older mounds: Two (marked with grey on the map below)

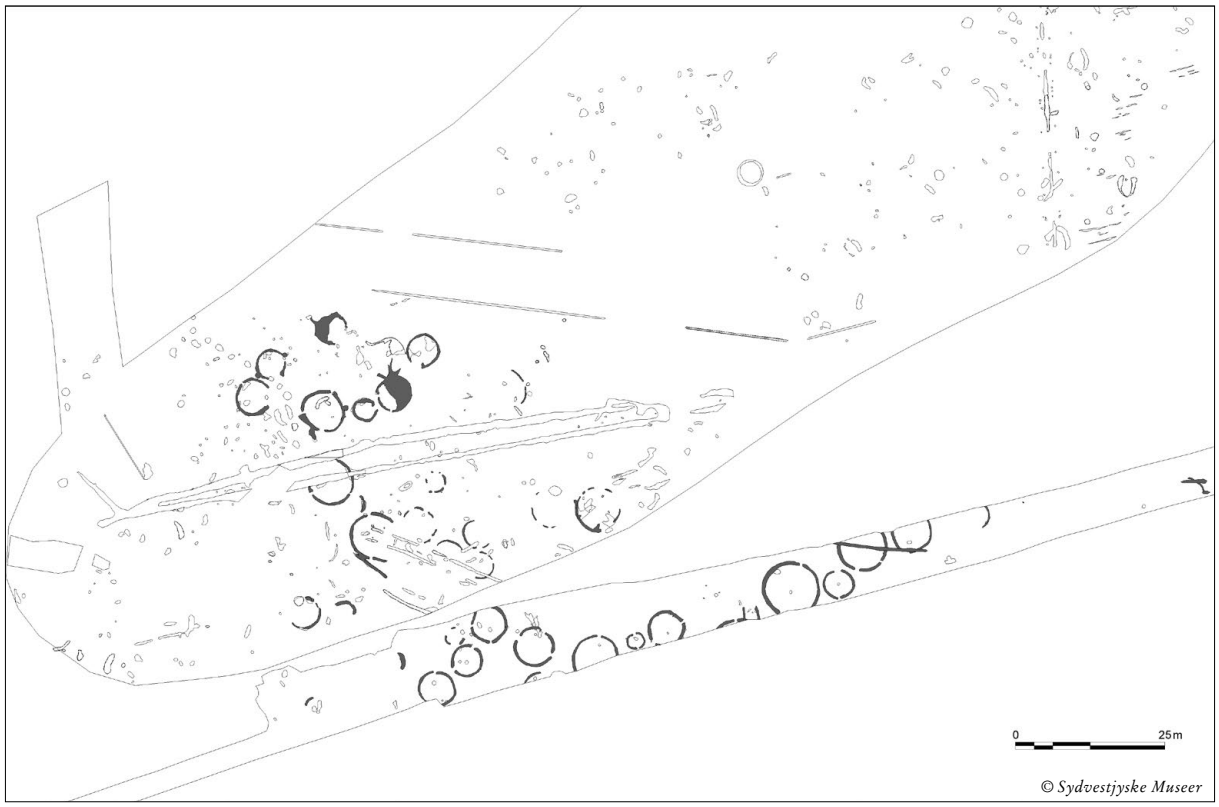


https://doi.org/10.2369/9783869354439.beyond-urnfields

Veldbæk
Esbjerg Museum, inv. no.: ESM 1357
Year of excavation: 1983; 1986; 1995
Number of graves: *c.* 125
Older mounds: 8
Reference: Møller et al. 2020, 42–43

https://doi.org/10.2369/9783869354439.beyond-urnfields

Nordskrænten
Esbjerg Museum, inv. no.: ESM 2256, ESM 2636
Year of excavation: 1998; 2008
Number of graves: 50
Older mounds: 2



https://doi.org/10.2369/9783869354439.beyond-urnfields

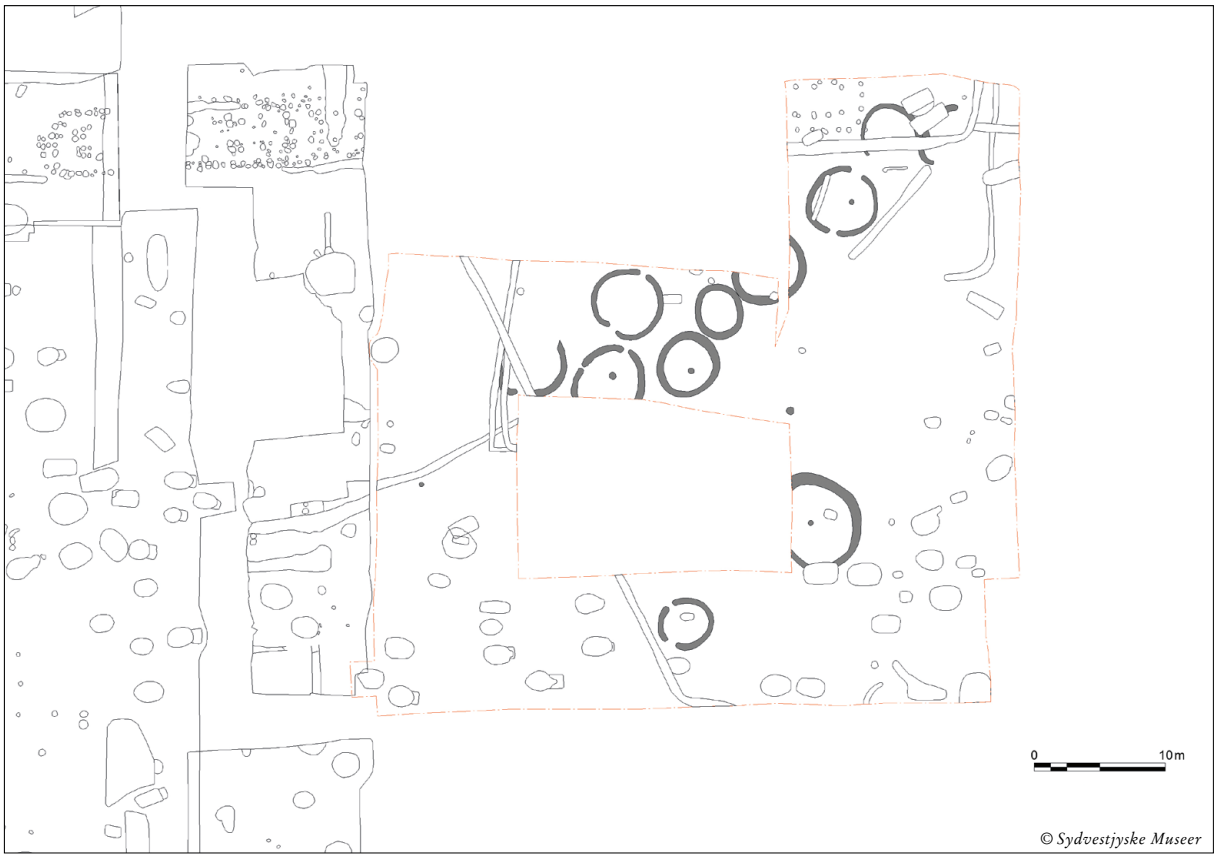
Solbakkegård
Esbjerg Museum, inv. no.: ESM 2178
Year of excavation: 1996; 1997
Number of graves: 20
Older mounds: 4

https://doi.org/10.2369/9783869354439.beyond-urnfields

Søhale
Esbjerg Museum, inv. no.: ESM 2139
Year of excavation: 1996
Number of graves: 103
Older mounds: 2
Reference: Møller et al. 2020

https://doi.org/10.2369/9783869354439.beyond-urnfields

Præstestien
Esbjerg Musuem, inv. no.: ESM 1421
Year of excavation: 1982
Number of graves: 12
Older mounds: 2



Forum, Bryndum
Nationalmuseet, fundberetning 52
Systemnummer (kulturarv.dk): 75436 190502-54
Year of excavation: 1891
Number of urnfield graves: *c.* 100

Korskro Grimstrupvej
Nationalmuseet, inv. no.: NM C6532-36
Year of excavation: 1890
Number of urnfield graves: 21
The urnfield was investigated in 1890 by A. P. Madsen, who describes 21 graves from the Pre-Roman Iron Age. No site plan could be found in the archives of southwest Denmark.

Korskro
Esbjerg Museum, inv. no.: ESM 1911
Year of trial investigation: 1993
The trial excavation revealed post holes from a Pre-Roman Iron Age house, 14 cooking pits and four uncertain features interpreted as pyre pits. Further investigations were not made on the site because

https://doi.org/10.2369/9783869354439.beyond-urnfields

RAS (Rigsantikvarens Arkæologiske Sekretariat) interpreted the uncertain features as traces of toppled trees.

Bibliography

Becker 1961: C. J. Becker, Førromersk jernalder i Syd- og Midtjylland. Nationalmuseets Skrifter, Større beretninger VI (København 1961).

Carlie 1998: A. Carlie, Käringsjön. A Fertility Sacrificial Site from the Late Roman Iron Age in South-west Sweden. Current Swedish Archaeology 6, 1998, 17–37.

Carlie 1999: A. Carlie, Sacred white stones. On Traditions of Building White Stones into Graves. Lund Archaeological Review 5, 1999, 41–58.

Dollar/Grundvad 2015: S. R. Dollar/L. Grundvad, Tuesbøl – En tuegravplads ved Brørup fra ældre førromersk jernalder. In: P. Foss/N. A. Møller (eds.), De dødes landskab. Grav og gravskik i ældre jernalder i Danmark. Beretning fra et colloquium i Ribe den 19.–20. marts 2013. Arkæologiske Skrifter 13 (Copenhagen 2015) 51–70.

Hansen 1998: S. S. Hansen, Yngre bronzealder, førromersk jernalder og ældre romersk jernalder, 1000 f.kr – 200 e.Kr. In: P. Asingh/L. Feveile/S. Jensen (eds.), Marsk, land og bebyggelse – Ribeegnen gennem 10.000 år. Jysk Arkæologisk Selskabs Skrifter 35 (Højbjerg 1998) 115–136.

Henriksen 2015: M. B. Henriksen, Kenotafer, ødelagte grave eller ofringer? Deponeringer og andre aktiviteter på ældre jernalders gravpladser. In: P. Foss/N. A. Møller (eds.), De dødes landskab. Grav og gravskik i ældre jernalder i Danmark. Beretning fra et colloquium i Ribe den 19.–20. marts 2013. Arkæologiske Skrifter 13 (Copenhagen 2015) 183–214.

Jensen 2005: C. K. Jensen, Kontekstuel kronologi – en revision af det kronologiske grundlag for førromersk jernalder i Sydskandinavien. LAG 7 (Højbjerg 2005).

Jørgensen 1975: E. Jørgensen, Tuernes Mysterier. Skalk 1975(1), 3–10.

Lorange 2015: T. Lorange, Det sakrale landskab ved Årre. Landskabets hukommelse gennem 4000 års gravriter. In: P. Foss/N. A. Møller (eds.), De dødes landskab. Grav og gravskik i ældre jernalder i Danmark. Beretning fra et colloquium i Ribe den 19.–20. marts 2013. Arkæologiske Skrifter 13 (Copenhagen 2015) 21–36.

Lund 2002: J. Lund, Forlev Nymølle. En offerplads fra yngre førromersk jernalder. Kuml 51, 2002, 143–196.

Møller 2013: N. A. Møller, Tuegravpladsen ved Jernvedlund. Levende Viden 1, 2013, 100–111.

Møller et al. 2020: N. A. Møller/L. L. Harvig/B. Grundvad, The Iron Age Urnfield Tradition of Southern Jutland, Denmark. Acta Archaeologica 91(1), 2020, 11–80.

Pantmann 2020: P. Pantmann, Lyse sten – et udfordrende arkæologisk fænomen med potentiale. Gefjon 5, 2020, 52–83.

Seah/Nair 1996: A. Seah/C. Nair, Vietnam. Cultures of the World (New York 1996).

Terkildsen 2015: K. Terkildsen, Gravpladsen Årupgård som kilde til social stratifikation i førromersk jernalder. In: P. Foss/N. A. Møller (eds.), De dødes landskab. Grav og gravskik i ældre jernalder i Danmark. Beretning fra et colloquium i Ribe den 19.–20. marts 2013. Arkæologiske Skrifter 13 (Copenhagen 2015) 51–70.

Veselka/Lemmers 2014: B. Veselka/S. Lemmers, Deliberate selective deposition of Iron Age cremations from Oosterhout (prov. Noord-Brabant, the Netherlands): a 'pars pro toto' burial ritual. LUNULA. Archaeologia protohistorica XXII, 2014, 151–158.

Willerslev 2013: R. Willerslev, God on trial. Human sacrifice, trickery, and faith. HAU: Journal of Ethnographic Theory 3(1), 2013, 140–54.

Wåhlin in print: S. Wåhlin, Six Human Skulls in a Bog – Svennum – a first century AD sacrificial bog. In: M. J. Walsh/S. O'Neill/L. Sørensen (eds.), In the Darkest of Days: Re-investigating Human Sacrifice and Value in Southern Scandinavian Prehistory (Oxford).

Bente Grundvad
Sydvestjyske Museer
Ribe
Denmark
Ben10@sydvestjyskemuseer.dk

Sarah Skytte Qvistgaard
Sydvestjyske Museer
Ribe
Denmark
SQ@sydvestjyskemuseer.dk

https://doi.org/10.2369/9783869354439.beyond-urnfields

https://doi.org/10.2369/9783869354439.beyond-urnfields

Revisiting Aarupgaard urnfield in southern Jutland, Denmark

Helene Agerskov Rose and Anna Egelund Poulsen

Keywords: Research history, Danish archaeology, historic excavations, digitalisation, research potential

Abstract: Urnfields were archaeologically recognised in Denmark in the late 19th century and the definition of the Pre-Roman Iron Age was largely based on these. Aarupgaard urnfield in southern Jutland was first registered in the 1890s, but it was not until 1947 that the first small archaeological excavation of the site was carried out, and in 1970–1972 the majority of the 60,000 m² urnfield was excavated. The urnfield is orientated approximately north-south with a large Bronze Age mound as initiation point, and it contains up to 1,500 urn graves dating to the Pre-Roman Iron Age (c. 500–100 BC). Individual urn graves were covered by small barrows within a circular ditch with two to six interruptions. Well-preserved barrows were found to be further demarcated by kerbstones or wooden posts. Besides ceramic urns, approximately one third of the 1,200 recovered graves contained burial goods connected to the personal dress attire, mostly pins and belt equipment of iron. This paper reports on the research history of Aarupgaard and on a new initiative to register and digitalise the vast archaeological find material and excavation documentation. We conclude that Aarupgaard urnfield holds a great research potential and offers unique insights into the population of southern Jutland in the Pre-Roman Iron Age.

Introduction

The first urnfields were recognised in southern Jutland, Denmark, in the late 19th century, shortly after Johanna Mestorf had published similar material from Schleswig-Holstein (Mestorf 1886). Uldal urnfield, west of Vojens, was the first site to be investigated in 1871–1890 (Becker 1961, 181; Lewring/Jørgensen 1999, 28; see also Christensen, this volume) and in the 1890s several urnfields were investigated as part of the Parish Survey carried out by the National Museum of Denmark and the Antiquarian Collection (now Sydvestjyske Museer; Neergaard 1892; Madsen/Neergaard 1894). The survey investigated 11 urnfields and close to 500 graves in southwest Jutland at a time when the monuments were still visible in the heathland landscape. Special attention was paid to Aarre urnfield, southeast of Varde, where 273 graves were investigated by digging a vertical shaft into each barrow to retrieve the urn at its centre. The construction of the monument itself was not described in detail.

The results were published by Andreas Peter Madsen and Carl Neergaard in 1894 and they pointed out the similarities in burial practise and artefact types within Denmark and northern Germany (Madsen/Neergaard 1894). They concluded that the urnfield graves were so homogenous in character that future excavations were not likely to alter this picture and left the remaining graves intact. The excavations had however produced sufficient material for typo-chronological studies and in the

https://doi.org/10.2369/9783869354439.beyond-urnfields

following years, the definition of the Pre-Roman Iron Age came to be based on artefact assemblages from the urnfields (Neergaard 1892; Knorr 1910).

In recent years, the urnfields have come back into focus and new investigations of both old and new excavations have demonstrated they still hold a large research potential (Møller et al. 2020; Rose 2020; Rose/Meadows in review). One urnfield of particular interest is Aarupgaard urnfield that was among the early-discovered urnfields of the late 19th century and has since been excavated during more field campaigns in the 20th century (Fig. 1). Although largely unpublished, the site has the potential to become a cornerstone in Early Iron Age research and to advance our understanding of the population of southern Jutland in the 1st millennium BC. The aim of this paper is to present the research history of Aarupgaard urnfield and provide insights into ongoing efforts towards a comprehensive analysis and publication of the site.

Aarupgaard urnfield

Aarupgaard urnfield is situated in southern Jutland, 12 km east of Ribe and 8 km west of Gram, on the western point of a low hill. Two rivers border the hill island; Gels Å to the south and Flads Å to the north, before they meet at its western most point to become Ribe Å. Aarupgaard urnfield is situated along a north-south orientated landscape corridor, at a suitable crossing point of Gels Å and Flads Å and must have been clearly visible to travellers.

Fig. 1. The location of Aarupaard urnfield in southern Jutland, Denmark (© Museum Sønderjylland).

https://doi.org/10.2369/9783869354439.beyond-urnfields

Early investigations

Aarupgaard urnfield was not part of the Parish Survey, but it was instead first observed by the local reverend Hans Frederik Nissen (Gram parish, 1888–1899) who investigated several small mounds in the northern and best-preserved part of the urnfield. This part was heathland and because it was believed to be the full extent of the urnfield, only a 72 x 72 m area was put under heritage protection in 1931 in order to ensure the preservation of the visible mounds along with a larger burial mound. In the following years, it became clear that the urnfield was larger than expected when locals found artefacts on the fields south of the protected area, originating from mounds destroyed by agricultural activity, and a local teacher (Georg Andreassen, Sønderby Skole, Kegnæs) dug up two urns from the northern part of the cultivated area. There are no records of Andreassen's observations, but the mounds might be among the ones described later by Hans Neumann from Museum Haderslev (now Museum Sønderjylland; Jørgensen 1970–1984). In 1947, Neumann conducted the first archaeological excavation at Aarupgaard where he excavated 17 mounds just south of the protected area with the purpose to establish how many urns could be identified in the cultivated area and register their state of preservation following years of agricultural activity. If possible, the urns and their content were to be excavated. Neumann devised a strategy with a combination of small sections and trenches in a wide north-south orientated lane. Over the first 125 m more 2.5 x 5 m sections were excavated, followed by 50 cm wide trenches at angles to each other for every 5 m and the addition of smaller trenches when necessary (Fig. 2). Neumann concluded that the urnfield was much larger than the protected area and that, given that its southernmost point had not yet been identified, it must be very large (Neumann 1947, excavation documentation).

Excavation campaigns 1970–1972

By the late 1960s, agricultural technologies and deep ploughing had progressed so much as to be a real threat to the survival of archaeological settlements and burial sites from the Bronze and Iron Ages. The Danish research council (*det Arkæologiske Bopladsudvalg, Statens Humanistiske Forskningsråd*) was inspired by the German research council (*Deutsche Forschungsgemeinchaft [DFG]*) that provided funding for important and large archaeological excavation and research projects. One of the Danish projects granted funding was Aarupgaard urnfield (Jørgensen 1971a, 5). Erik Jørgensen from Haderslev Museum directed three field campaigns in 1970–1972, with the aim of finding the total extend of the urnfield and compiling an overview plan. The urnfield barrows were no longer visible in the field that had been cultivated up until the excavations, but Jørgensen was granted permission to investigate selected parts of the protected area to document the construction of the monuments (Jørgensen 1970–1984).

The excavation campaigns produced a large archaeological material, now archived at Museum Sønderjylland (Jørgensen 1970–1984). The artefacts went through conservation and were measured and described along with detailed drawings of metal artefacts and a large part of the ceramics. The descriptions do however vary with some urns being described thoroughly and others only cursorily. The urns were reconstructed if possible.

Jørgensen published four short popular articles during and shortly after the excavation campaigns (Jørgensen 1971a; b; 1972; 1975). He continued to work towards a full publication of the material until the early 2000s, but this considerable work remains mainly in the form of extensive notes archived at Museum Sønderjylland (Jørgensen 1970–1984; 1989). The following description is based on published data as well as excavation documentation and post-excavation notes.

Excavation methods

Jørgensen was influenced by Becker's investigations of Aarre urnfield in 1953–1954, where special attention was paid to circular ditches and other features in relation to the urnfield barrows (Becker

https://doi.org/10.2369/9783869354439.beyond-urnfields

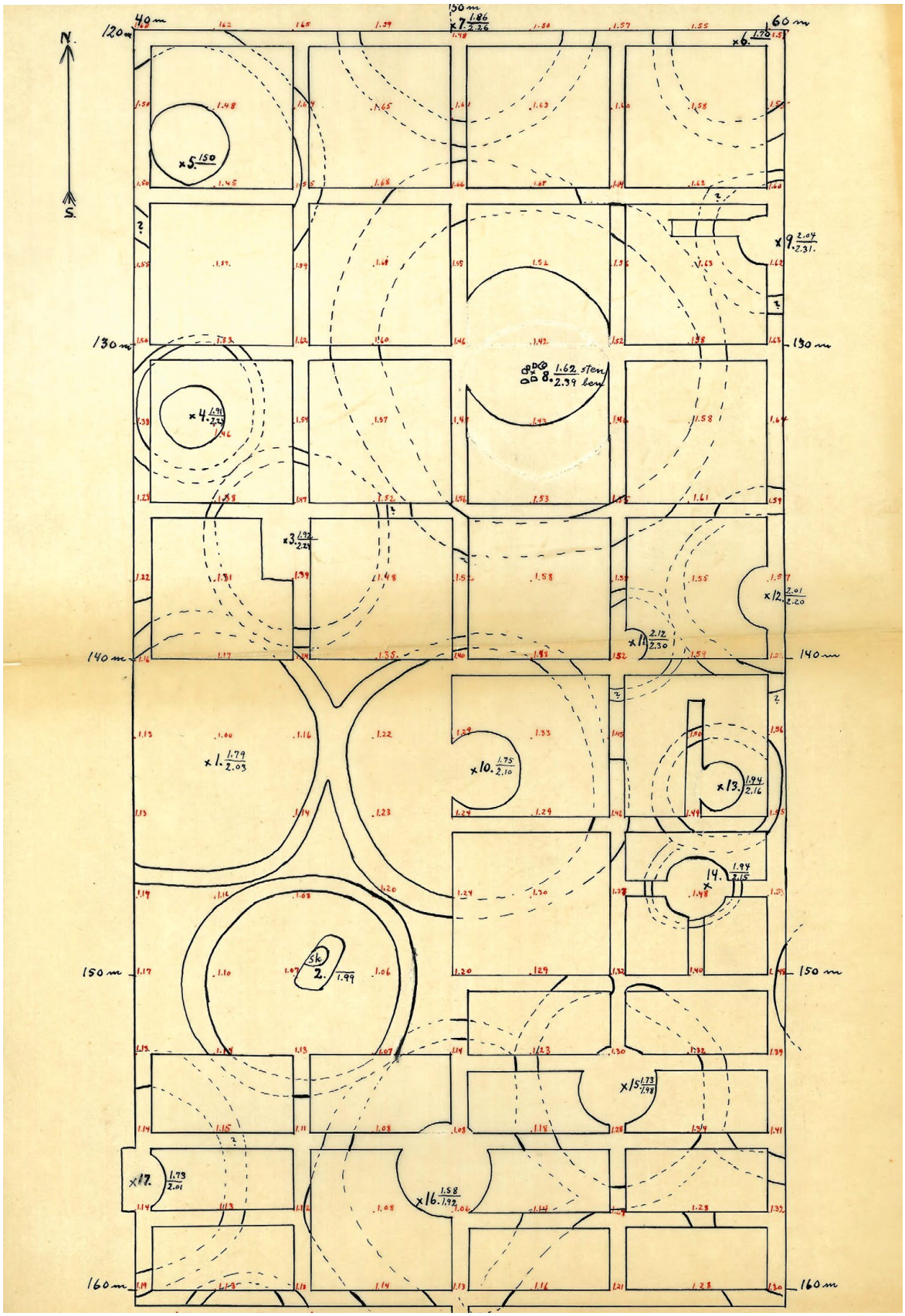


Fig. 2. Site plan of the 1947 excavation, conducted by Hans Neumann, Museum Haderslev (© Museum Sønderjylland).

https://doi.org/10.2369/9783869354439.beyond-urnfields

1961). Although a significant improvement to earlier excavations that focused only on the urns, Jørgensen's excavation methods and documentation cannot be compared to excavations carried out today. Removing large amounts of topsoil by machine was a new method at this time; it opened the possibility for large-scale archaeological excavations. At Aarupgaard, the topsoil was removed in 20 m wide sections, which revealed clearly distinguishable circular ditches that had been filled in by drift sand (Fig. 3). The surface was registered with drawings in scale 1:50 which were compiled to a large site plan. All urns were excavated and examined at the museum, although some were poorly preserved and were examined on-site. The circular ditches were emptied, but unfortunately, no cross sections were made in the cultivated area. In the protected area, all monuments within a 20 m wide section, plus a few selected ones outside of this, were comprehensively excavated and documented (Jørgensen 1970–1984).

Urnfield organisation

A large burial mound, presumably from the Bronze Age, served as initiation point of burials at Aarupgaard. This burial mound was largely destroyed before Jørgensen's excavations, but it contained three secondary urn graves that are typologically dated to the Bronze/Iron Age transition period (Jørgensen 1975, 3). These graves were probably among the first burials at the site, and from this point the urnfield expanded along a southbound trajectory over time. The urnfield mounds are placed in close proximity, but for the large majority without any intercutting, and their organisation can be described using horizontal stratigraphy (ibid., 4), which is supported by artefact typologies (cf. Becker 1961; Jensen 2005). The urnfield covers an area of *c.* 60,000 m^2, measuring *c.* 100 –200 m across (east-west) and *c.* 450 from north to south (Fig. 4). The graves can be divided into a large western group

Fig. 3. Photo from the 1971 excavation. The circular ditches are emptied up in the foreground and in the background they are visible as lighter circles against the underground (© Museum Sønderjylland).

https://doi.org/10.2369/9783869354439.beyond-urnfields

Fig. 4. Site plan of Aarupgaard urnfield based on the 1970–1972 excavations conducted by Erik Jørgensen, Museum Haderslev (now Museum Sønderjylland), with a modern ortho-map as background. The yellow circle marks the Bronze Age mound and initiation point of the burials; the western burial group is marked by red circles and the eastern burial group by blue circles (© Museum Sønderjylland).

(Fig. 4: red outlines) and a smaller eastern group (Fig. 4: blue outlines). Both burial groups start out from the Bronze Age mound (Fig. 4: yellow circle) and remain in use throughout the urnfield's use life, although with differing burial tempi as reflected by the different sizes of the groups (Jørgensen 1975, 4). The excavation campaign uncovered *c.* 1,200 graves, with 94 of these from the protected area. Counting the unknown number of graves still within the protected area, the urnfield is believed to have contained up to 1,500 burials originally, making Aarupgaard by far the largest urnfield in present-day Denmark.

Grave types

The majority of excavated graves are from the cultivated part of the urnfield, where only the central urns and the circular ditches were preserved, whereas the urnfield mounds from the protected area were considerably better preserved. The following description is largely based on the latter group of graves.

Jørgensen did not register any cremation graves without an urn, although he notes four small pits containing charcoal and a few over-ploughed structures that he interprets as destroyed urn graves, although no ceramic was registered. It would appear that all graves at Aarupgaard are urn graves, placed in a primary grave pit in the underground, which may be lined with stones. Most urns were then covered by a small mound and the majority of these again were enclosed by a circular ditch (Jørgensen 1975, 6). The ditch dimensions were not recorded, but Jørgensen notes that they correlated with the size of the barrow, i.e. larger barrows had wider and deeper ditches, whereas smaller barrows had more narrow and shallow ditches (Jørgensen 1970–1984). In the northern part of the

https://doi.org/10.2369/9783869354439.beyond-urnfields

urnfield, the circular ditches have up to six interruptions, whereas in the southern part the ditches only have two interruptions oriented north and south. The shift from more than two to only two interruptions coincides with the introduction of belt equipment as burial goods (Jørgensen 1975, 4).

All the investigated urnfield mounds in the protected area were demarcated by kerbstones or wooden posts, but the two phenomena never occur within the same monument. Both kerbstones and wooden posts were placed on the inner side of the circular ditch and respect the interruptions of the circular ditches, in some instances even demarcating these further. The wooden posts were pointed and measured *c.* 10 cm in diameter. They were rammed *c.* 1 m into the ground on the inner side of the circular ditch and placed 30–40 cm apart, reaching a total number of 50–60 posts per mound (Jørgensen 1975, 6).

The small urnfield mounds measure 1–10 m in diameter, with a mean of 4.2 m. The average mounds probably had an original height of 1–2 m, but with enough variation for Jørgensen to divide the mound construction into two types: flat mounds corresponding to the amount of soil removed from the circular ditches, and taller mounds where more soil than just that from the circular ditches had been added (Jørgensen 1975, 9).

Most of the graves contained cremated human remains (*c.* 70 %, with a mean of 640 g). Empty graves also occur regularly, but it is unclear whether they are cenotaphs or reflect poor preservation of more fragile bones, such as from children (Jørgensen 1975, 8). The pattern is not pronounced, but larger mounds tend to have larger amounts of human remains compared to smaller mounds. Three mounds measuring 9 m in diameter contained 1,450 g cremated human remains on average, whereas two mounds measuring 10 m in diameter contained 75 g and 2,600 g human remains, respectively.

An osteological analysis of a subset of the human remains (n = 58) has revealed that both cremations and subsequent handling of the cremated bone were carried out in a both rigorous and uniform manner, resulting in a very homogenous material (Harvig 2019). Although no remains of pyres have been located near Aarupgaard, the pyres must have been large and well-constructed to burn with a high intensity, fully cremating the bone. The analysis demonstrated the presence of women, men and children of all ages. A remarkable large number of children was identified (20 out of 58), which agrees with similar findings from Søhale urnfield near Esbjerg, southwest Jutland (Møller et al. 2020, 29).

The excavation documentation and later notes of Jørgensen pay little attention to the simpler urn graves placed in the empty areas in between the urnfield mounds. Even though agricultural activity can account for removing an original mound, this is unlikely because all graves with mounds also have circular ditches, which in turn were well preserved, even in the cultivated part of the urnfield. We expect these urn graves to be later in-fillings that for some reason never received a mound and circular ditch. Similar observations can be made in other parts of the urnfield, where large mounds are enclosed by smaller mounds and urn graves, forming grave groups. The internal dynamic of the graves awaits further investigation, but we refer to the stimulating research of Wenke Domscheit on grave groups from the Late Bronze Age-Early Iron Age at the grave field in Pinnow, Mecklenburg-Western Pomerania (Domscheit, this volume), in the expectation that similar results might be achieved for Aarupgaard.

Burial goods

All graves contained a ceramic vessel as funerary urn for the cremated human remains. Some graves also had secondary vessels placed either next to the primary urn or in the circular ditch, and a few of these contained a small amount of cremated bone. The full pottery repertoire found at settlement sites includes a range of vessels in different sizes, but at Aarupgaard, mainly large- to medium-sized storage vessels were used as urns, and small bowls and cups as secondary vessels. Some secondary miniature vessels have unusual shapes, such as the small partridge-shaped vessel from grave 13 (Fig. 5; Jørgensen 1971b).

https://doi.org/10.2369/9783869354439.beyond-urnfields

Fig. 5. Miniature vessel shaped as a partridge from grave 13 at Aarupgaard urnfield (© Museum Sønderjylland).

Approximately one third of the 1,200 recovered graves contained burial goods connected to the personal dress attire (Fig. 6). Artefacts were either mixed with the cremated bones or placed on top of them. Most of these are very fragmented because they have accompanied the dead on the pyre. The entire Pre-Roman Iron Age metal repertoire, as known from e.g. Aarre urnfield (Becker 1961), is represented at Aarupgaard and it is largely comparable to material from Schleswig-Holstein (e.g. Hingst 1980). The most frequent artefact category is dress pins made of iron (although bronze pins also occur), including: pin with coiled head (*krølhovednål*), pin with circular head (*ringhovednål*), pin with bomb-shaped head (*bombehovednål*), Holstein pin (*holstensk nål*), pin with grooved head (*rillehovednål*), winged-head pin (*vingehovednål*), and pin with rod-shaped head (*stavhovednål*). A grave can contain one to three pins, but pins often occur in pairs. The second most frequent find category is belt equipment of mostly iron, including: iron or bronze ring with eyelet (*øskenring*), tongue-shaped belt hook (*tungeformet bæltehage*), triangular belt hook (*trekantet bæltehage*), narrow belt hook (*smalt bæltehage*), iron ring with attached shank (*jernring med tvinge*) and O-rings. Rarer find categories include bronze neck rings, chains of bronze or iron connecting sets of pins, and twee-

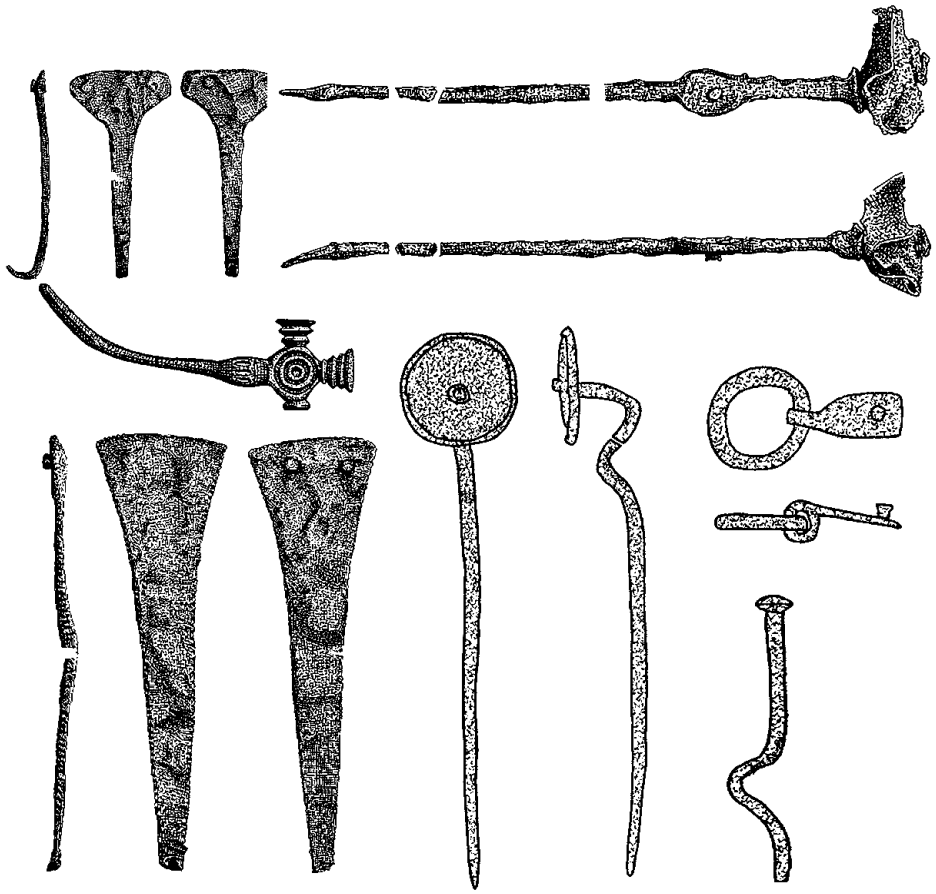


Fig. 6. Selection of burial goods from Aarupgaard urnfield. Drawings are not to scale (© Museum Sønderjylland).

https://doi.org/10.2369/9783869354439.beyond-urnfields

zers of bronze or iron. There are no weapon finds, which corresponds to a general lack of weapons in graves from the Early Pre-Roman Iron Age (Jensen 2005, fig. 129).

The urnfield burials have been described as 'poor' or 'simple' because the majority contain limited if any artefacts, which has in turn led to descriptions of the Early Pre-Roman Iron Age society as being anonymous and marked by a collective identity (Jensen 2003, 55–56). Kamilla Terkildsen has attempted to challenge the apparent lack of social hierarchy and suggests the presence of more social strata based on the premise that rarity of artefacts is an indicator of social status (Terkildsen 2015, 58–67). Others have questioned this premise and suggested that the full range of objects included in the graves is a better indicator (Møller et al. 2020, 72). It has further been proposed that studies of Pre-Roman Iron Age status markers not only consider burials, but also wetland deposits, metal detector finds, and settlement material (Haue 2015, 181–182). Social stratification may have been present and expressed in ways that do not preserve archaeologically, or that have not been investigated yet. A recent study from the Lower-Rhine Basin in the Netherlands indeed suggests that the urnfields graves are the product of complex funerary practices and that the inclusion of even simple artefacts might have been used as metaphors in the creation of ancestral identities, inextricably linking the dead to the land (Louwen 2021, 235–238; this volume).

Relative and absolute dating

Jørgensen suggested Aarupgaard urnfield was in use for four centuries, *c.* 500–100 BC, based on relatively dated artefact typologies (Jørgensen 1975, 8–9). Claus Kjeld Jensen has studied the pottery, and even though he suggested the site be divided into three groups based on the results, he refrained from drawing any absolute boundaries between these (Jensen 1992; 1996). This is repeated in his later revision of the Pre-Roman Iron Age chronology of southern Scandinavia (Jensen 2005, 168–172).

The first author of this paper has radiocarbon-dated cremated bone from a large number of graves from Aarupgaard urnfield as part of a larger study of Early Iron Age material culture from southern Jutland, Denmark (Rose 2020). Investigations of this first large-scale radiocarbon dataset using Bayesian statistics reveal that burial activity at Aarupgaard lasted about four centuries, starting already in the late 7th to early 6th century BC and lasting until the late 3rd century BC. This is considerably earlier than the previously accepted chronological framework that was however largely unsupported by absolute dates. The new site chronology of Aarupgaard is supported by the duration of burial activity remaining the same as suggested by Jørgensen and by comparable early estimated starts of Søhale and Aarre urnfields (Rose/Meadows in review).

Up-to-date registrations and new approaches to digitalisation

All the archaeological documentation and material from Aarupgaard urnfield is today archived at Museum Sønderjylland in Haderslev. In 2018, a project aiming to publish the site in its entirety was initiated and the second author of this paper has since worked towards new and up-to-date registrations of the archival material. Around one third of the 1,200 excavated urns contained one or more artefacts, totaling over 3,000 artefacts, but none of these was registered digitally prior to 2018. The digitalisation is carried out in a database designed specifically for museum artefacts (SARA, managed by *Slots- og Kulturstyrelsen*). The handwritten lists, descriptions and excavation notes containing field observations have priority. Prior to the digitalisation, all available information had to be sorted and categorised, which turned out to be more time-consuming than anticipated. Many lists were incomplete, and some appeared in more versions with slightly different content, making it quite the detective work to ensure only the correct information ended up in the database. Another challenge was the naming of the digital posts. Today, all artefacts receive a unique number during excavation or post-excavation analysis. The materials from Aarupgaard had however been given the same number

https://doi.org/10.2369/9783869354439.beyond-urnfields

if they came from the same monument, including the barrow, urn, secondary vessel, cremated bones and metal artefacts. So, e.g. no. 1505 could be the number of a whole monument with barrow, urn and artefacts and bones together as one. To keep the original numbering, letters were added to the number to indicate which type of artefact was described.

To register any urn from Aarupgaard up to nine different folders with lists, measurements, descriptions, depictions and general excavation notes had to be consulted. This is a time-consuming process and new problems kept presenting themselves. The same urn could be listed with a miniature vessel on one list, but without any grave goods on another one. There could be lid fragments in one description and no such lid mentioned in the two folders describing all the lids. One description could mention only one metal dress pin, while a list in another folder mentioned two fragmented dress pins. So once again, detective work had to be carried out to make sure that only the correct information ended up in the database.

The next priority was the excavation site plans, which were large and difficult to handle and scan properly. Again, plans are present in different versions, both in large rolled up versions, smaller copies and the ones Erik Jørgensen used for publications, but unfortunately, they all differ slightly from one another.

The preferred approach to digitalise the many burial monuments would be to geo-reference the plans in a GIS-program using Erik Jørgensen's excavation coordinates from the 1970s. Unfortunately, this was not possible because some of the coordinates were incomplete, making the site appear distorted. The corners of the protected moorland were however unchanged and in an alternative approach orthophotos were combined with the old excavation plans, drone pictures and new precision GPS measurements of landmarks using the Agisoft Metashape software. This process provided new coordinates that were successfully melted together to form a new digital layout of the urnfield.

Drone flights at the burial site provided overview images, which enabled mapping using photogrammetry. A mosaic of pictures was taken from an altitude of 50 m and 100 m. With an overlap of 70 %, the images were 'sown' together (photogrammetry) using Agisoft Metashape software to create an orthomosaic. This was then georeferenced using the new GPS coordinates. The orthomosaic could then be used as a base for the old site plans, which were now easily fitted into place in the GIS-program Mapinfo.

During the photogrammetry process, the height values were also recorded. With this data, it was possible to create a Digital Elevation Model (DEM, Fig. 7). When colour was added to the DEM it became clear how the agriculturally disturbed part of the urnfield is completely flat today (uniform blue colour), but many of the mounds in the protected moorland are clearly distinguishable and stand out in light green colours. The DEM was produced by using a height map where contours were generated to form the shapes of the landscape at the burial site. The height values also provided the coordinates of the mounds in the moorland. These were used in addition to the new GPS coordinates in the creation of the digital map of the urnfield.

Final remarks

In collaboration with Kiel University, a geomagnetic survey of 16.75 ha on and around the urnfield was conducted in 2020, with the aim to identify possible cremation pyres or other activities connected to the urnfield. The geomagnetic survey detected a few anomalies that might be of interest, although most of these are likely natural phenomena. Other disturbances were clearly geological and not archaeological. The geomagnetic results are not conclusive, but they should nonetheless be consulted in the case of future archaeological surveys or excavations at the site.

https://doi.org/10.2369/9783869354439.beyond-urnfields

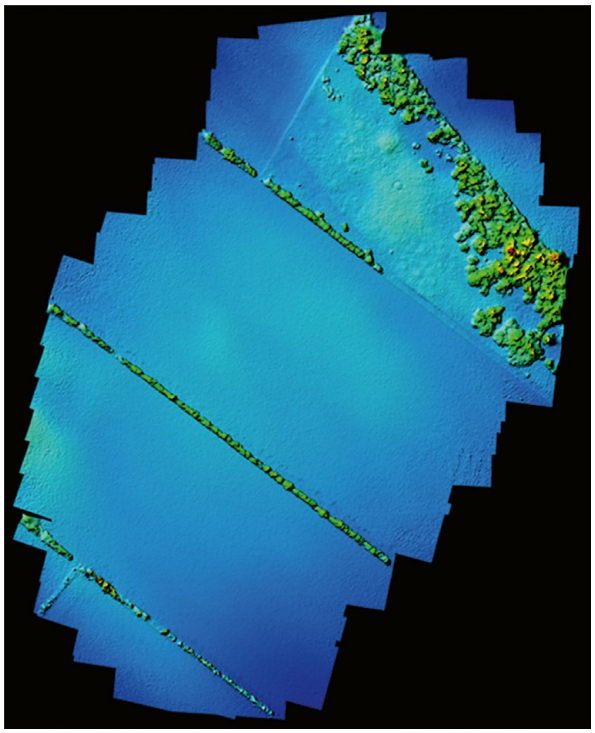


Fig. 7. Digital Elevation Model (DEM) of Aarupgaard urnfield. Uniform blue colour indicates flat areas, green colours indicate elevated areas (© Museum Sønderjylland).

75 years have now passed since Neumann carried out the first archaeological excavation of Aarupgaard urnfield, but the material retains a great research potential (cf. Poulsen/Rose 2022). Apart from the large collection of artefacts, the archives also hold cremated human remains from *c.* 1,000 graves, which is an exceptional number in a prehistoric Scandinavian context. An initial osteological analysis of part of the cremated human remains demonstrates that the material is well suited for further analysis (Harvig 2019). With recent methodological advances, it is now possible to radiocarbon date cremated bone, and with strontium isotope analysis it can be investigated whether individuals are local or non-local to the area where they were buried. In combination with further osteological and palaeodemographic analyses of the human remains and archaeological analyses of the burial practice and the artefact assemblages, Aarupgaard urnfield offers unique insights into the population of southern Jutland in the Pre-Roman Iron Age.

Acknowledgements

The study is part of the URNFIELD project and funded by Interreg Deutschland-Danmark as well as Zentrum für Baltische und Skandinavische Archäologie (ZBSA; Centre for Baltic and Scandinavian Archaeology), Schleswig, and Museum Sønderjylland – Arkæologi Haderslev. The authors wish to thank their colleagues from both archaeological institutions for help and advice in relation to the project.

Bibliography

Becker 1961: C. J. Becker, Førromersk jernalder i Syd- og Midjylland. Nationalmuseets Skrifter, Større beretninger VI (København 1961).

Harvig 2019: L. Harvig, Osteologisk undersøgelse af brændt skeletmateriale fra tuegravfeltet Aarupgaard, 500–100 f.Kr. Unpubl. Report, Museum Sønderjylland, Arkæologi Haderslev (Haderslev 2019).

Haue 2015: N. Haue, Gravformer og gravskik i Nordjylland i ældre jernalder. In: P. Foss/N. A. Møller (eds.), De dødes landskab. Grav og gravskik i ældre jernalder in Danmark. Beretning fra et colloquium i Ribe den 19.–20. marts 2013. Arkæologiske Skrifter 13 (København 2015) 171–182.

Hingst 1980: H. Hingst, Neumünster-Oberjörn. Ein Urnenfriedhof der vorrömischen Eisenzeit am Oberjörn und die vor- und frühgeschichtliche Besiedlung auf dem Neumünsteraner Sander. Urnenfriedhöfe Schleswig-Holsteins 5 = Offa-Bücher 43 (Neumünster 1980).

Jensen 1992: C. K. Jensen, Om behovet for en nyvurdering af den førromerske kronologi. Lag 3, 1992, 53–73.

Jensen 1996: C. K. Jensen, Chronologische Probleme und ihre Bedeutung für das Verständnis der vorrömischen Eisenzeit in Süd-/Mitteljütland. Praehistorische Zeitschrift 71(2), 1996, 194–216.

Jensen 2003: J. Jensen, Danmarks Odtid. Ældre Jernalder 500 f.Kr.–400 e.Kr. (Viborg 2003).

Jensen 2005: C. K. Jensen, Kontekstuel kronologi – en revision af det kronologiske grundlag for førromersk jernalder i Sydskandinavien. LAG 7 (Højbjerg 2005).

Jørgensen 1970–1984: E. Jørgensen, Excavation documentation and post-excavation notes. Unpubl. docu-

https://doi.org/10.2369/9783869354439.beyond-urnfields

mentation, Museum Haderslev/Museum Sønderjylland (Haderslev 1970–1984).
Jørgensen 1971a: E. Jørgensen, Liden tue. Skalk 1971(2), 3–7.
Jørgensen 1971b: E. Jørgensen, Tuegravpladsen ved Årupgård. Haderslev Amts Museum 13(2), 1971, 72–77.
Jørgensen 1972: E. Jørgensen, Tuegravpladsen ved Årupgård II. Haderslev Amts Museum 13(3), 1972, 105–109.
Jørgensen 1975: E. Jørgensen, Tuernes mysterier. Skalk 1975(1), 3–10.
Jørgensen 1989: E. Jørgensen, Truslen fra Rom. Skalk 1989(5), 10–15.

Knorr 1910: F. Knorr, Friedhöfe der älteren Eisenzeit in Schleswig-Holstein (Kiel 1910).

Lewring/Jørgensen 1999: A. Lewring/E. Jørgensen, Berigtigelse. Skalk 1999(1), 28–31.
Louwen 2021: A. Louwen, Breaking and making the ancestors. Piecing together the urnfield mortuary process in the Lower-Rhine-Basin, ca. 1300–400 BC (Leiden 2021).

Madsen/Neergaard 1894: A. P. Madsen/C. Neergaard, Jydske Gravpladser fra den førromerske Jernalder. Aarbøger for Nordisk Oldkyndighed og Historie 9, 1894, 165–212.
Mestorf 1886: J. Mestorf, Urnenfriedhöfe aus Schleswig-Holstein (Hamburg 1886).
Møller et al. 2020: N. A. Møller/L. Harvig/B. Grundvad, The Iron Age urnfield tradition of southwestern Jutland, Denmark. Acta Archaeologica 91(1), 2020, 11–80.

Neergaard 1892: C. Neergaard, Meddelelser fra Nationalmuseets danske Samling: Jernalderen. Aarbøger for Nordisk Oldkyndighed og Historie 7, 1892, 207–341.
Neumann 1947: H. Neumann, Excavation documentation. Unpubl. documentation, Museum Haderslev/Museum Sønderjylland (Haderslev 1947).

Poulsen/Rose 2022: A. E. Poulsen/H. A Rose, Aarupgaard tuegravplads gennem 75 år. Arkæologi i Slesvig/Archäologie in Schleswig 19, 2022, 155–165.

Rose 2020: H. A. Rose, Bayesian chronological modelling of the Early Iron Age in Southern Jutland, Denmark. PhD dissertation, Kiel University (Kiel 2020). https://macau.uni-kiel.de/receive/macau_mods_00001258.
Rose/Meadows in review: H. A. Rose/J. Meadows, Dividing time – an absolute chronological study of material culture from Early Iron Age urnfields in Denmark. PLOS ONE.

Terkildsen 2015: K. F. Terkildsen, Gravpladsen Årupgård som kilde til social stratifikation i førromersk jernalder. In: P. Foss/N. A. Møller (eds.), De dødes landskab. Grav og gravskik i ældre jernalder in Danmark. Beretning fra et colloquium i Ribe den 19.–20. marts 2013. Arkæologiske Skrifter 13 (København 2015) 51–70.

Helene Agerskov Rose
University of Gothenburg
Department of Historical Studies
Gothenburg
Sweden
helene.agerskov.rose@gu.se

Anna Egelund Poulsen
Museum Sønderjylland – Arkæologi Haderslev
Haderslev
Denmark
anpo@msj.dk

https://doi.org/10.2369/9783869354439.beyond-urnfields

Urn cemeteries from the Pre-Roman Iron Age to the Migration Period in Schleswig-Holstein: An overview of the research history

Angelika Abegg-Wigg

Keywords: Urn cemeteries, Pre-Roman Iron Age, Roman Iron Age, Migration Period, Schleswig-Holstein, research history

Abstract: The most common form of burial from the later Bronze Age to the Migration Period in Schleswig-Holstein was urned cremation burial in grave fields. The scientific study of these urn cemeteries in Schleswig-Holstein can be traced back to the second half of the 19th century. In particular, it is closely associated with the history of the Museum für Archäologie Schloss Gottorf, *which was founded in 1836, and the researchers and archaeologists who were working there. To this must be added the* Archäologisches Landesamt Schleswig-Holstein, *founded in 1933, and the* Institut für Ur- und Frühgeschichte der Christian-Albrechts-Universität zu Kiel, *which until 1998 was institutionally associated with the museum. This overview of the research history deals with urn cemeteries from the Pre-Roman Iron Age to the Migration Period. This is due to the fact that continuity in their use is documented in some urn cemeteries as well as the spatial proximity in which they were established across different time periods. The publications by Johanna Mestorf (1828–1909) and Friedrich Knorr (1872–1936) are the first fundamental presentations of materials regarding the urn cemeteries. Gustav Schwantes (1881–1960) in the 1930s and 1940s initiated the systematic field exploration of mound and flat graves. In the years after World War II, these efforts were continued. Up into the 1990s, this was characterised by the publication of extensive grave field catalogues and research reports.*

Introduction

The predominant burial form in Schleswig-Holstein from the Late Bronze Age to the Late Migration Period was cremation. The cremated remains of both body and grave goods were primarily deposited in an urn and buried in a cemetery. For these pre- and protohistoric burial sites with urns, which were, especially in the 19th century, called *Urnenfriedhöfe* in German archaeological terminology, the term *Urnengräberfelder* is more common nowadays. These have been investigated in Schleswig-Holstein since the second half of the 19th century (Articus 2004), and this research is closely associated with the history and research tradition of the *Museum für Archäologie Schloss Gottorf* (founded in 1836) and those researchers and archaeologists who were working there. Names to be mentioned include Heinrich Handelmann (1827–1891), Johanna Mestorf (1828–1909), Friedrich Knorr (1872–1936), Carl Rothmann (1875–1952), Gustav Schwantes (1881–1960), Hans Hingst (1908–1998), Klaus Raddatz (1914–2002), and Michael Gebühr (1942–2021). To this must be added the *Archäologisches*

https://doi.org/10.2369/9783869354439.beyond-urnfields

Landesamt Schleswig-Holstein, which was founded in 1933, and the *Institut für Ur- und Frühgeschichte der Christian-Albrechts-Universität zu Kiel*, which until 1998 was institutionally associated with the museum.

The following overview of the research history deals with urn cemeteries from the Pre-Roman Iron Age to the Migration Period. The reason for this is the much-documented continuity in their use, for example, from the Pre-Roman to the Roman Iron Age, or the spatial proximity in which they were established across different time periods. And very often the grave sites were the subject of both research and archaeological fieldwork.

Research in the 19th and early 20th centuries

The articles published in 1877 by Handelmann (1877a; b) and Mestorf (1877a) in the *Schriften des Naturwissenschaftlichen Vereins für Schleswig-Holstein* have already dealt with the 'great burial places or urn fields'[1] (Mestorf 1877a, 8–9), some of which were discovered back in the 1830s and 1840s and are still important for an assessment of Iron Age burial customs in Schleswig-Holstein (Figs. 1–2). They include, for example, the burial site of Ratsberg in Pinneberg, Kr. (German: *Kreis* = district) Pinneberg, which is documented to have been in use from the Pre-Roman to the Roman Iron Age and where urns were first discovered in 1846 (Mestorf 1877a, 15–20; Abegg-Wigg 2021 with further references). In the vicinity of the cremation grave site of Borgstedt (Kr. Rendsburg-Eckernförde), which has been known to us since 1876 and which was in use in the Roman Iron Age and the Migration Period (Handelmann 1877a), are further Bronze Age, Pre-Roman Iron Age, and Migration Period graves, which have been excavated up until recent times. The same applies to the urn cemeteries known since the 19th century in Bad Segeberg, Klein Gladebrügge, and Schwissel (all Kr. Segeberg; Handelmann 1877b; Schemainda 2010).

In her 1877 publication *Die vaterländischen Alterthümer Schleswig-Holsteins*, Mestorf emphasises the significance of the urn cemeteries: 'The only means at our disposal to gain further insight into the early Iron Age is a comprehensive and systematic examination, carried out with expertise and caution, of those u r n c e m e t e r i e s [original highlighting], which are exceedingly numerous from the banks of the river Elbe up to Jutland. Urn cemeteries is what we call the burial places of our ancestors from the first centuries of our time; enclosed fields where the urns containing the cremated bones were lowered into the ground, just like coffins in our churchyards today. […] The correct study of these localities is not confined to the cautious excavation of the jars; many things must be kept in mind, e.g. the boundaries of the grave field, changes in the burial customs or in the grave goods, […]'[2] (Mestorf 1877b, 18–19). Her advice regarding the potential for the analysis of urn cemeteries is still valid.

Apart from agriculture, the developing construction of roads and canals during the last quarter of the 19th century and the first quarter of the 20th century led to a great emergence of archaeological finds and therefore also urn graves. The shortage of funds and labour force made it hard for the muse-

1 Original German text: „grossen Begräbnisplätzen oder Urnenfeldern".

2 Original German text: „Das einzige uns zu Gebote stehende Mittel über die frühe Eisenzeit weiteren Aufschluß zu gewinnen, ist eine umfassende, mit Sachkenntniß und Umsicht systematisch vollzogene Aufdeckung jener U r n e n f r i e d h ö f e [original highlighting], welche von dem Ufer der Elbe bis nach Jütland hinauf, überaus zahlreich sind. Urnenfriedhöfe nennen wir die Begräbnisplätze unserer Vorfahren aus den ersten Jahrhunderten unserer Zeitrechnung, eingehegte Felder, wo die Urnen mit den verbrannten Gebeinen in die Erde gesenkt sind, wie auf unseren heutigen Kirchhöfen die Särge. […] Die correcte Untersuchung solcher Localitäten beschränkt sich nicht auf das vorsichtige Ausheben der Töpfe, es ist da manches zu beobachten, z. B. die Begrenzung des Gräberfeldes, vorkommende Aenderungen in den Begräbnißbräuchen, in den Beigaben, […]."

https://doi.org/10.2369/9783869354439.beyond-urnfields

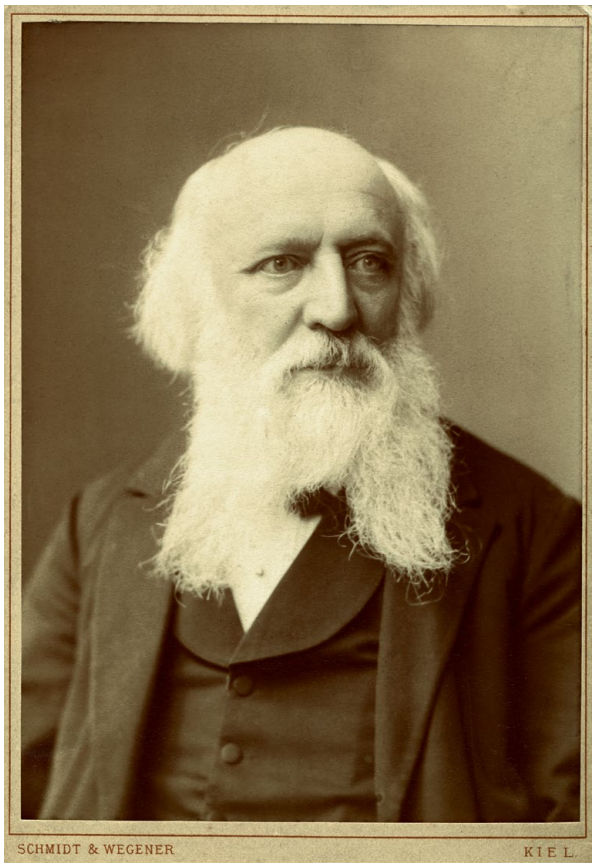


Fig. 1. Heinrich Handelmann (1827–1891). After 1866, he was conservator of the Museum Vaterländischer Altertümer *in Kiel and its director from 1873 until his death (photo © Museum für Archäologie Schloss Gottorf, Schleswig).*

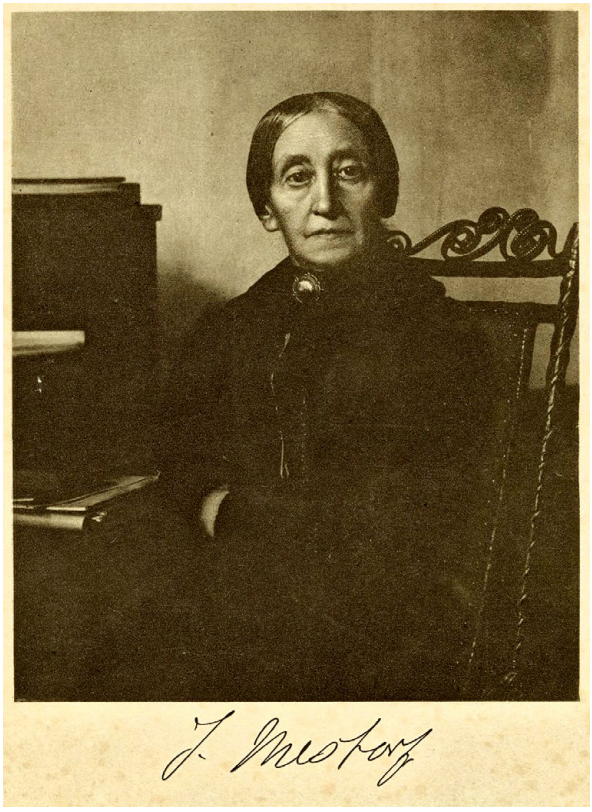


Fig. 2. Johanna Mestorf (1828–1909). After 1873, she worked as curator at the Museum Vaterländischer Altertümer *and between 1891 and 1909 was its director (photo © Museum für Archäologie Schloss Gottorf, Schleswig).*

um to follow up on all the activities (Schwantes 1939, 335–336; Abegg-Wigg 2018, 34), but Mestorf managed to present an inventory of the finds. As a result, her 1886 book *Urnenfriedhöfe in Schleswig-Holstein* is considered the first catalogue of cemeteries dating to the Pre-Roman and Roman Iron Ages and the Migration Period (Mestorf 1886; Schwantes 1940a, 319–320; Brather 2002, 180). It contains a list of 172 urn cemeteries in the regions of Holstein, Lauenburg, and Schleswig. It should be noted that sites north of the present-day German-Danish border were included with the region of Schleswig, in accordance with the political conditions of the time. Even though she was only able to carry out a broad evaluation of the urn cemeteries in regard to their characteristics and their development over time, the systematic presentation of the find material was exemplary for her time and remains so today. This aspect was highlighted by Rudolf Virchow (1821–1902) in his 1886 review of the book: 'The main issue certainly remains the presentation of the complete inventory of finds of this period in the duchies'[3] (Virchow 1886, 289).

The book *Friedhöfe der älteren Eisenzeit in Schleswig-Holstein* published by Knorr in 1910 (Fig. 3) is regarded as a continuation of, and as complementary to, Mestorf's *Urnenfriedhöfe*, but the time period is limited to 'the cemeteries of the earlier Iron Age until the onset of Roman cultural influence'[4]

3 Original German text: „Die Hauptsache bleibt jedenfalls die Darlegung des ganzen Bestandes an Fundstücken dieser Periode in den Herzogthümern."

4 Original German text: „die Friedhöfe der älteren Eisenzeit bis zum Eintritt des Einflusses römischer Kultur".

https://doi.org/10.2369/9783869354439.beyond-urnfields

Fig. 3. Friedrich Knorr (1872–1936) was Johanna Mestorf's successor as museum director from 1909 to 1928 (photo © Museum für Archäologie Schloss Gottorf, Schleswig).

(Knorr 1910, 5). Mestorf initially dated the oldest urn cemeteries to the period around 200 BC, but later changed that to around the 4th century BC (Mestorf 1886, VII; 1898, 163; Brather 2002, 181–182). Knorr, on the other hand, dated their beginnings to the early 5th century BC (Knorr 1910, 13).

Both Mestorf (Mestorf 1886, III–V) and Knorr have touched upon the grave forms in their respective writings. Knorr also includes this issue in his statement regarding the chronological development of the Pre-Roman Iron Age cemeteries (Knorr 1910, 15–18). He describes the continuation of the Bronze Age tradition of burial under small mounds into the earlier Pre-Roman Iron Age and flat grave burials in 'extensive urn fields'[5] (Knorr 1910, 17). As early as 1885, Mestorf had drawn attention to this continuity of the mounds, but did not elaborate on this point, not even in her book on *Urnenfriedhöfe* or subsequent publications (Mestorf 1885, 11; 1886, IV; 1898, 157). As examples of burials under small mounds during the earlier Pre-Roman Iron Age, Knorr mentions barrow cemeteries in Holstein, such as Gudendorf, Sankt Michaelisdonn-Hindorf, and Barlt (all Kr. Dithmarschen), which were investigated in 1939/1940 for a research project (see below). Referring to Carl Neergaard (Neergaard 1892, 211), he mentions that in Jutland many barrow cemeteries such as these had already been examined. For these barrows or barrow cemeteries in recent German publications, the terms *Buckelgrab* and *Buckelgräberfelder* are used, too (Hingst 1976; 1983, 10, 32; 1986, 18–19; Willroth 1992, 190; Bräunig 2014, 81 fig. 1, 86). A few of these small mounds in Schleswig-Holstein have circular enclosure ditches with openings (Lütjens 2014, 32–34). Comparable structures of the Pre-Roman Iron Age are known from central and southern Jutland in Denmark and are called *tuegrave* (e.g. Rindel 2015; Terkildsen 2015).

As other grave forms (Figs. 4–5), Mestorf and Knorr cite secondary urn burials with or without stone packing under pre-existing mounds, various forms of protective stone packing surrounding the urns in flat graves, and urns under stone paving (Mestorf 1886, III–IV; Knorr 1910, 17–18; Hingst 1986, 19).

Research from the 1930s to the early 1940s

From the early 1930s onwards, Schwantes, who from 1929 was director of the *Museum Vaterländischer Altertümer* in Kiel (today: *Museum für Archäologie Schloss Gottorf*) and, after 1931, professor at Kiel University, initiated a systematic survey of barrow and flat grave cemeteries that continued

5 Original German text: „ausgedehnten Urnenfeldern".

https://doi.org/10.2369/9783869354439.beyond-urnfields

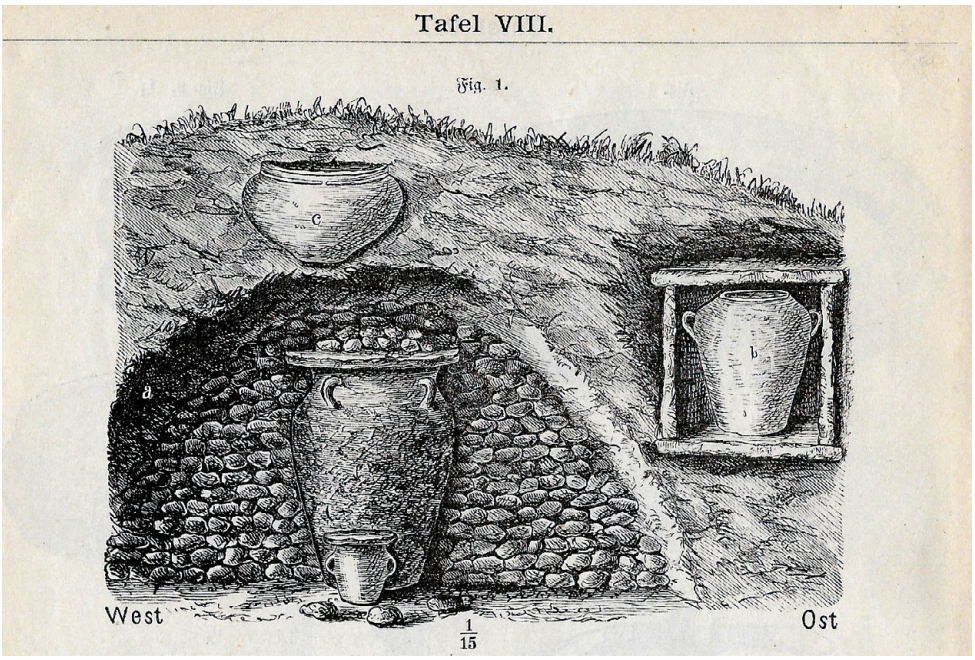


Fig. 4. Sylt-Ost (Morsum Kliff), Kr. Nordfriesland. Bronze Age burial mound LA 14 (Handelmann Hügel no. 48) with Iron Age secondary burial. The urn c (K.S. 3747) only contained cremated remains and no grave goods (after Mestorf *1877b, table VIII fig. 1).*

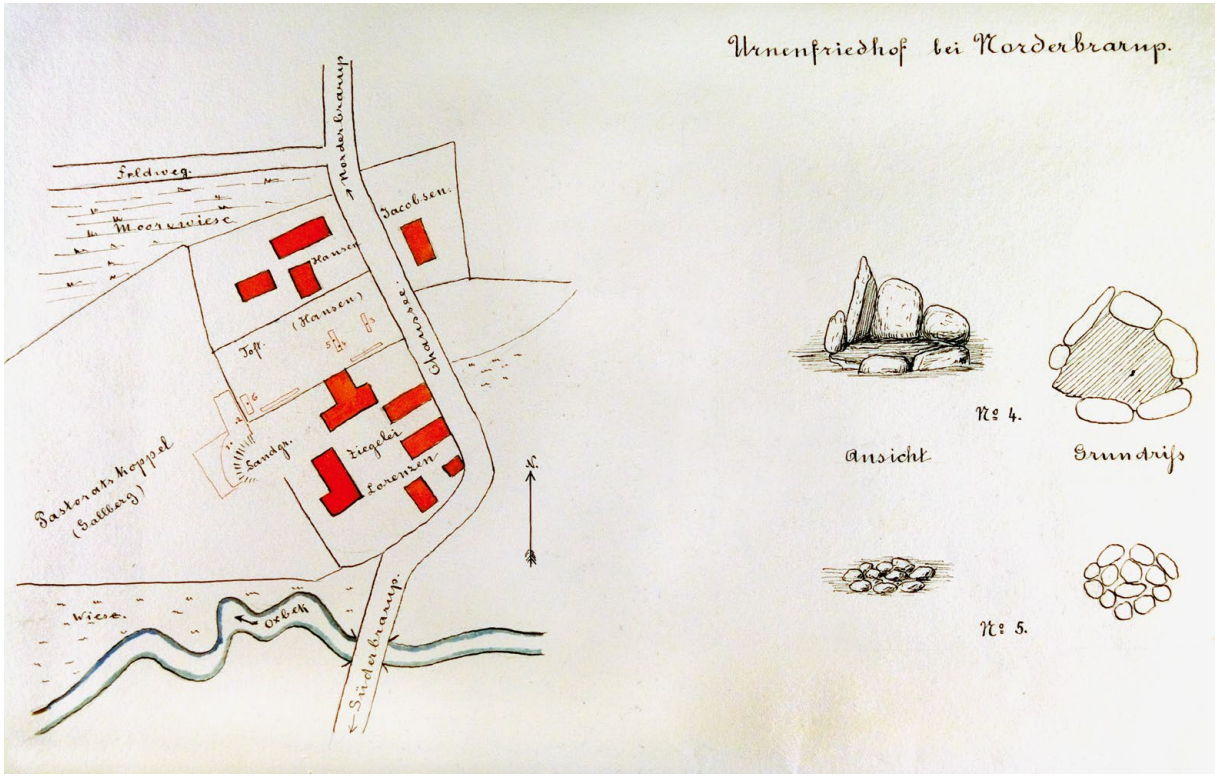


Fig. 5. Norderbrarup, Kr. Schleswig-Flensburg. Grave field LA 23 of the Pre-Roman Iron Age to the Migration period. Plan of the excavation by Wilhelm Splieth, 1892 (© Documentation Archive, Museum für Archäologie Schloss Gottorf, Schleswig).

https://doi.org/10.2369/9783869354439.beyond-urnfields

into the early years of the war (Raddatz 1962, 404–405; Hingst 1983, 10; Schäfer 2015, 108). As early as 1911, in his study of urn cemeteries near Uelzen and Lüneburg, which was published independently of Knorr, Schwantes had presented essentially identical results regarding Pre-Roman Iron Age grave forms (Schwantes 1911). With this publication, he established the monograph series *Die Urnenfriedhöfe in Niedersachsen,* of which the latest, volume 18, was published in 2017 (Laux 2017).

Also, through the close cooperation with the *Archäologische Landesaufnahme* in Schleswig-Holstein, which had already been set up in 1923 (institutionalised since 1935), and the *Landesamt für schleswig-holsteinische Vorgeschichte* (today: *Archäologisches Landesamt Schleswig-Holstein*) founded ten years later (Ickerodt 2021), many urn cemeteries were reported and excavated. So, in 1933, excavations were conducted by, for example, Karl Kersten (1909–1992) at the barrow cemetery of Brickeln in Dithmarschen (Fig. 6; Hingst 1983, 83–91), and by Hermann Schwabedissen (1911–1994) at the urn cemetery in Drage (Kr. Steinburg; Schwabedissen 1938). These excavation activities intensified after 1938/1939 with financial support from the National-Socialist *Lehr- und Forschungsgemeinschaft 'Das Ahnenerbe'* (Schwantes 1939, 347; 1940b; Schäfer 2015, 108). It was the firm intention to completely excavate one large urn cemetery within each of the settlement landscapes of Schleswig-Holstein, in order to obtain material that would be useful not only for the chronological studies, but also for studies of the settlement history (Jankuhn 1979, 251–252).

Accordingly, in 1939 and 1940, Otto Rochna (1915–1994) examined several cemeteries that had been discovered during construction work by the *Wehrmacht*, but also conducted planned excavations in both Westholstein and Schleswig (Rochna 1940; 1941/1942; Hingst 1983, 10). The excavation of the urn cemetery in the market square of Süderbrarup (Kr. Schleswig-Flensburg) is of special significance here (Raddatz 1962, 405–406 with references). It is one of the most important cemeteries of the 1st to 6th centuries AD in Schleswig-Holstein, with a total of 1,234 burials, nearly all urn cremations, of which 780 have been anthropologically investigated (Bantelmann 1988; Wahl 1988). In eastern Holstein, 588 graves of the Pre-Roman Iron Age were uncovered between 1938 and 1939 at the burial site of Lanze (Kr. Herzogtum Lauenburg), which was threatened by gravel extraction (Raddatz 1962, 405 with references; Reinbacher 1962). During the same period, Rothmann conducted partial and salvage excavations at urn cemeteries in Bad Segeberg, (Quarnbek-)Landwehr (Kr. Rendsburg-Eckernförde), and (Schashagen-)Merkendorf (Kr. Ostholstein), among others (Rothmann 1940; Raddatz 1961a, sheets D93, D99; Michel 2005, 69–70 no. 406, 107–108 no. 666). In the course of the construction of the *Reichsautobahnen* Hamburg–Lübeck (after 1934) and Hamburg–Berlin (after 1937), today's federal motorways A1 and A24, the urn cemetery of Hornbek (Kr. Herzogtum Lauenburg; Fig. 7) was examined (Morgenroth 1939; Borchling 1942). Here, about 900 graves from the Ripdorf period to Eggers' phase B2 were uncovered. Due to the outbreak of World War II, the excavations of the 1930s and their publications in many cases could not be completed. Until about 1942, only short preliminary reports were published (e.g. Borchling 1942; Morgenroth 1939).

Research after World War II

After World War II, fieldwork was resumed, among other reasons due to the dangers posed to the cemeteries by intensive construction activities and agriculture (Raddatz 1962, 405). Furthermore, Schwantes' plan to excavate urn cemeteries in all the settlement areas in Schleswig-Holstein as completely as possible (see H. Hingst in Behrends 1968, 5; J. Reichstein in Hingst 1989, 9) was carried out further and in multiple cases also achieved. Raddatz, for example, completed in 1961 the excavations at Süderbrarup that had been suspended in 1941 (Raddatz 1961b; 1962, 405–406; Bantelmann 1988; Wahl 1988). He also conducted new excavations in Anglia: in Husby (Kr. Schleswig-

https://doi.org/10.2369/9783869354439.beyond-urnfields

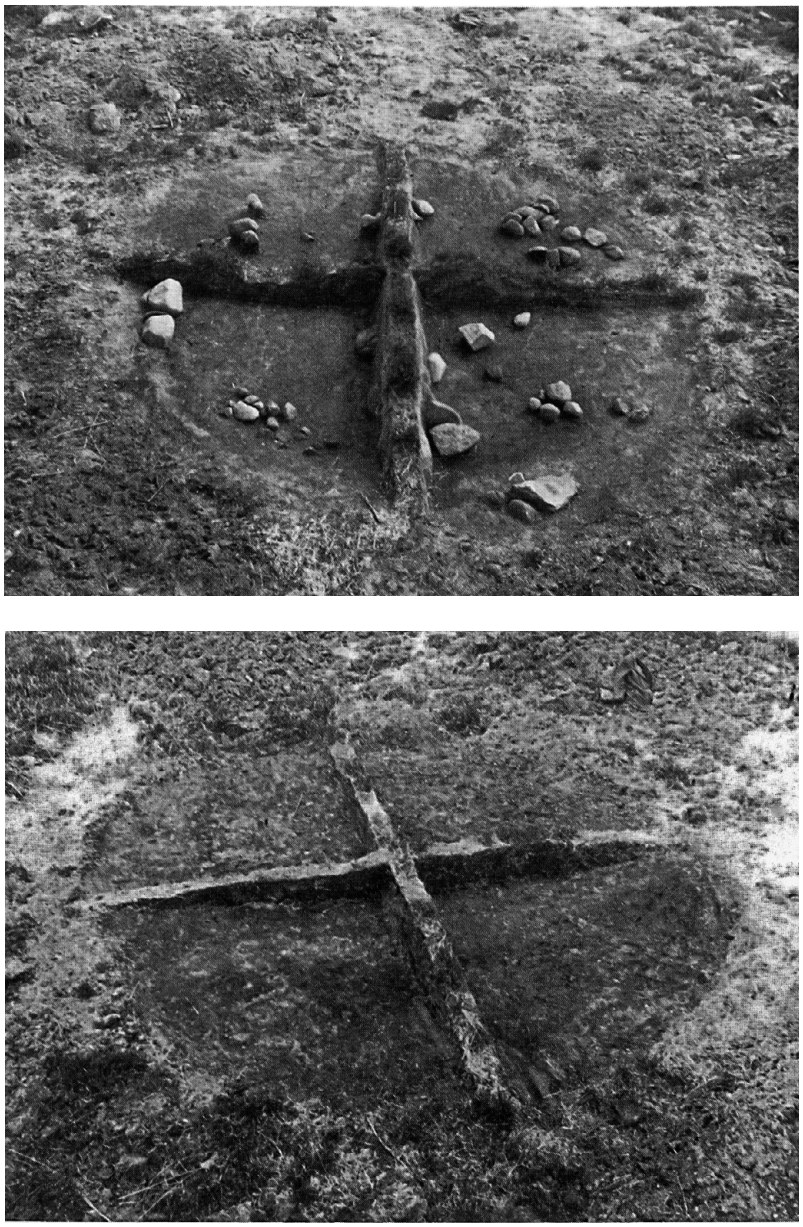


Fig. 6. Brickeln, Kr. Dithmarschen. Excavation 1933 in the barrow cemetery LA 2–10, 30–71. 1: Mound 28; 2: Mound 44 (after Hingst *1983, plate 85,1–2).*

Flensburg) in 1955/1960 (Raddatz 1967; 1974) and in Sörup (Kr. Schleswig-Flensburg) in 1958–1960 (Raddatz 1981; Lagler 1989).

The cremation cemetery of Jevenstedt (Kr. Rendsburg-Eckernförde), which had been investigated by Rothmann before World War I, was uncovered completely in 1951/1952 by Hingst and yielded 629 urn graves in total (Hingst 1974). In the 1950s, more large urn cemeteries were examined in Holstein: Preetz (Kr. Plön) in 1950 and 1952 (Brandt 1960), Hamfelde (Kr. Herzogtum Lauenburg) in 1950–1952 and 1956 (Bantelmann 1971), Neumünster-Oberjörn in 1951/1952 (Hingst 1980), Schwissel (Kr. Segeberg) in 1956–1959 (Behrends 1968), Kasseedorf (Kr. Ostholstein) in 1957/1958 (Articus 2004), and Timmendorfer Strand-Groß Timmendorf (Kr. Ostholstein) in 1959/1960 (Hingst 1989, 12–33; 81–161; Fischer 2000). Some of the excavations were published soon afterwards, such as Preetz (Brandt 1960), the chariot burial of Husby (Raddatz 1967), and Schwissel (Behrends

https://doi.org/10.2369/9783869354439.beyond-urnfields

Fig. 7. Hornbek, Kr. Herzogtum Lauenburg. Urn cemetery LA 1. View of the excavation area in 1935 (photo © Documentation Archive, Museum für Archäologie Schloss Gottorf, Schleswig).

1968). Cemeteries excavated before World War II, such as Hornbek or Lanze, were now processed as part of doctoral theses and published subsequently (Rangs-Borchling 1963; Reinbacher 1962).

The 1968 publication of Schwissel was the first volume of the special series of the Offa-Bücher *Urnenfriedhöfe Schleswig-Holsteins*, which had been established at the suggestion of Georg Kossack (1923–2004) and aims at the publication of all the larger later Bronze Age as well as the Pre-Roman and Roman Iron Age urn cemeteries (Hingst 1983, 5; Reichstein 1989). The project received continuous support from the *Deutsche Forschungsgemeinschaft (DFG)* from 1958 until verifiably at least 1983. The most recent volume in this series deals with the Roman Iron Age and Migration Period burial site at Schmalstede (Kr. Rendsburg-Eckernförde; Bode 1998).

Research since the 1990s

Since around the 1990s, a number of studies dealing with graves and urn cemeteries in Schleswig-Holstein, as well as settlement-archaeological investigations, have been published that are dedicated to issues such as the typological examination of grave forms, urns, and grave goods, relative-chronological classification, and different aspects of burial site analysis (e.g. Willroth 1992; Articus 2004; Michel 2005). Their aim is to record the urn cemeteries as a whole and to measure their significance in the prehistoric landscape. In this way, differences in the developments of burial customs and grave furnishings are made visible, and conclusions can be drawn about demography and social structures (cf. e.g. Knöpke 2005; Brock 2007; Gebühr 2007; Derks 2012).

René Bräunig, for example, summarily describes the burial structures in the Jastorf area and their regional distribution, assigning Holstein to the so-called *Unterelbegruppe*. This Lower Elbe group is characterised by flat graves (urns with bowl as lid), clusters of cremated remains, *Buckelgräber*, stone circles and rings, as well as stone pavings (Bräunig 2014). With the exception of the *Buckelgräber*, Bräunig lists the same burial forms for the region of Schleswig (belonging to the South Jutlandic

https://doi.org/10.2369/9783869354439.beyond-urnfields

group), which is not quite correct. As a matter of fact, Ingo Lütjens does mention small barrows, in some instances surrounded by circular ditches, dating to the Early Pre-Roman Iron Age in North Frisia and the North Frisian Islands (Lütjens 1996, 72–75). These regional differentiations in the Schleswig-Holstein grave forms continue into the Roman Iron Age and Migration Period (Schlotfeldt 2016), where the predominant burial form is still cremation burial in an urn in a flat grave field (Willroth 1992, 357–358; Michel 2005, 90). Secondary burials in mounds also occur during this period. Urns are placed in the ground with or without (stone) protection. Cremation pit graves with or without containers (*Brandschüttungs-/Brandgrubengräber*) are very rare (Willroth 1992, 358; Michel 2005, 90 note 373).

Apart from the actual graves, the examination of features associated with the burials and of the internal organisation of the cremation cemeteries can provide insights into the ritual treatment of the dead. To date, this aspect has been taken into account in only a few publications dealing with the research on the urn cemeteries in Schleswig-Holstein (Abegg-Wigg 2007; 2017; Schlotfeldt 2016) and has not been investigated comprehensively and systematically.

Research and natural sciences – interdisciplinary studies

Since the 1960s, anthropological studies of the cremated remains were included in the evaluation of the Schleswig-Holstein burial sites (e.g. U. Schaefer in Brandt 1960, 93–111; U. Aner in Bantelmann 1971, 58–77). In the 1980s, the research project *Untersuchung von Leichenbränden aus schleswig-holsteinischen Urnenfriedhöfen* (funded by the *DFG*) analysed the cremated remains from thirteen urn cemeteries in middle and east Holstein that date to a period from the later Bronze Age to the Migration Period. Within a larger regional and diachronic framework, this made it possible to evaluate anthropological data and to contextualise them with the archaeological features (Kühl 1966; Wahl 1988; Hingst et al. 1990; Schutkowski/Hummel 1991; Gebühr 2007). Initial molecular genetic analyses (ancient DNA) of cremated remains from the Pre-Roman and Roman Iron Ages have been carried out, but further-reaching studies and interpretations are necessary here (Heinrich 2009).

There are very few investigations of textile remains (K. Tidow in Saggau 1986, 123–124), botanical remains and charcoal (H. Gottwald in Saggau 1986, 122; Wahl 1988, 114–116), as well as animal bones (Wahl 1988, 117–121). These remains are often not preserved or archaeologically recovered from pyres (cf. a compilation of pyre sites in Schleswig-Holstein in Abegg-Wigg 2017, 266–268) and cremation graves, meaning little can be said at present regarding the possible significance of plants and animals in the burial customs and their role as grave goods. In spite of this, the numerous urn cemeteries dating to the period from the Pre-Roman Iron Age to the Migration Period in Schleswig-Holstein offer a large and informative material basis and dataset for the reconstruction of the funerary customs and social structures from the 6th century BC to the 6th century AD in Schleswig-Holstein.

Translation: D. H. Steinforth, Göttingen

Bibliography

Abegg-Wigg 2007: A. Abegg-Wigg, Begräbnisplätze – „Begegnung mit den Toten". In: Archäologisches Landesmuseum in der Stiftung Schleswig-Holsteinische Landesmuseen Schloß Gottorf/M. Freudenberg (eds.), Tod und Jenseits. Totenbrauchtum in Schleswig-Holstein von der Jungsteinzeit bis zur Eisenzeit (Schleswig 2007) 64–71.

Abegg-Wigg 2017: A. Abegg-Wigg, Zur inneren Struktur und Nutzung von Brandgräberfeldern während der Römischen Kaiserzeit in Schleswig-Holstein. In: B. V.

https://doi.org/10.2369/9783869354439.beyond-urnfields

Eriksen/A. Abegg-Wigg/R. Bleile/U. Ickerodt (eds.), Interaktion ohne Grenzen. Beispiele archäologischer Forschungen am Beginn des 21. Jahrhunderts/Interaction without borders. Exemplary archaeological research at the beginning of the 21st century (Schleswig 2017) 265–273.

Abegg-Wigg 2018: A. Abegg-Wigg, Urnenfunde an der „Kiel-Rendsburger Chaussee". Ein eisenzeitliches Gräberfeld bei Achterwehr-Schönwohld. Archäologische Nachrichten Schleswig-Holstein 24, 2018, 34–37.

Abegg-Wigg 2021: A. Abegg-Wigg, Ein Grab mit silbertauschiertem Reitersporn von Pinneberg-Ratsberg (Kr. Pinneberg) aus der Übergangsphase zur jüngeren Römischen Kaiserzeit. Ein Beispiel für die Elitenkommunikation zwischen Südskandinavien, Schleswig-Holstein und dem Donauraum. Mit einer anthropologischen Bestimmung von Helene Agerskov Rose. Archäologisches Korrespondenzblatt 51, 2021, 547–563.

Articus 2004: R. Articus, Das Urnengräberfeld von Kasseedorf, Lkr. Ostholstein. Die Entwicklung des südöstlichen Schleswig-Holstein während der jüngeren römischen Kaiserzeit. Internationale Archäologie 74 (Rahden/Westf. 2004).

Bantelmann 1971: N. Bantelmann, Hamfelde, Kreis Herzogtum Lauenburg. Ein Urnenfeld der römischen Kaiserzeit in Holstein. Urnenfriedhöfe Schleswig-Holsteins 2 = Offa-Bücher 24 (Neumünster 1971).

Bantelmann 1988: N. Bantelmann, Süderbrarup. Ein Gräberfeld der römischen Kaiserzeit und Völkerwanderungszeit in Angeln 1. Archäologische Untersuchungen. Urnenfriedhöfe Schleswig-Holsteins 11,1 = Offa-Bücher 63 (Neumünster 1988).

Behrends 1968: R.-H. Behrends, Schwissel. Ein Urnengräberfeld der vorrömischen Eisenzeit aus Holstein. Urnenfriedhöfe Schleswig-Holsteins 1 = Offa-Bücher 22 (Neumünster 1968).

Bode 1998: M.-J. Bode, Schmalstede. Ein Urnengräberfeld der Kaiser- und Völkerwanderungszeit. Urnenfriedhöfe Schleswig-Holsteins 14 = Offa-Bücher 78 (Neumünster 1998).

Borchling 1942: A. Borchling, Die Ausgrabung des Urnenfriedhofes von Hornbek, Kr. Hzgt. Lauenburg. Nachrichtenblatt für Deutsche Vorzeit 18, 1942, 97–98.

Brandt 1960: J. Brandt, Das Urnengräberfeld von Preetz in Holstein (2. bis 4. Jahrhundert nach Christi Geburt). Offa-Bücher 16 (Neumünster 1960).

Brather 2002: M.-J. Brather, Johanna Mestorf, die erste Bodendenkmalpflegerin Schleswig-Holsteins. Ein Vergleich ihrer Studienergebnisse zu Urnenfriedhöfen mit unserem heutigen Kenntnisstand. In: J. K. Koch/E.-M. Mertens (eds.), Eine Dame zwischen 500 Herren. Johanna Mestorf – Werk und Wirkung. Frauen – Forschung – Archäologie 4 (Münster, New York, München, Berlin 2002) 177–194.

Bräunig 2014: R. Bräunig, Die Bestattungssitten der Jastorfkultur. In: J. Brandt/B. Rauchfuß (eds.), Das Jastorf-Konzept und die vorrömische Eisenzeit im nördlichen Mitteleuropa. Beiträge der internationalen Tagung zum einhundertjährigen Jubiläum der Veröffentlichung „Die ältesten Urnenfriedhöfe bei Uelzen und Lüneburg" durch Gustav Schwantes, 18.–22.05.2011 in Bad Bevensen. Veröffentlichung des Archäologischen Museums Hamburg und Stadtmuseums Harburg 105 (Hamburg 2014) 81–90.

Brock 2007: Th. Brock, Wo sind die Kinder? Zum Bestattungsort von Säuglingen und Kleinkindern im prähistorischen Schleswig-Holstein. In: St. Burmeister/H. Derks/J. von Richthofen (eds.), Zweiundvierzig. Festschrift für Michael Gebühr zum 65. Geburtstag. Internationale Archäologie. Studia honoraria 25 (Rahden/Westf. 2007) 283–294.

Derks 2012: H. Derks, Gräber und „Geschlechterfragen". Studie zu den Bestattungssitten der älteren Römischen Kaiserzeit. Archäologische Berichte 24 (Bonn 2012).

Fischer 2000: L. Fischer, Das Gräberfeld der vorrömischen Eisenzeit von Groß Timmendorf, Kr. Ostholstein. Untersuchungen zu Chronologie, räumlicher Struktur und gesellschaftlichem Wandel. Unpubl. Diss., Kiel University (Kiel 2000).

Gebühr 2007: M. Gebühr, Tod und Jenseits in der Eisenzeit. In: Archäologisches Landesmuseum in der Stiftung Schleswig-Holsteinische Landesmuseen Schloß Gottorf/M. Freudenberg (eds.), Tod und Jenseits. Totenbrauchtum in Schleswig-Holstein von der Jungsteinzeit bis zur Eisenzeit (Schleswig 2007) 28–37.

Handelmann 1877a: H. Handelmann, Das Urnenlager bei Borgstedterfeld (Kirchspiel Bünstorf). Schriften des Naturwissenschaftlichen Vereins für Schleswig-Holstein 2, H. 2, 1877, 78–81.

Handelmann 1877b: H. Handelmann, Urnenfunde bei Segeberg. Schriften des Naturwissenschaftlichen Vereins für Schleswig-Holstein 2, H. 2, 1877, 82–84.

Heinrich 2009: A. Heinrich, Molekulargenetische Analysen aus historischem Leichenbrand und stark degradiertem humanen Material. Unpubl. Diss., Kiel University (Kiel 2009). https://macau.uni-kiel.de/receive/diss_mods_00004328?lang=de.

Hingst 1974: H. Hingst, Jevenstedt. Ein Urnenfriedhof der älteren vorrömischen Eisenzeit im Kreise Rendsburg-Eckernförde, Holstein. Urnenfriedhöfe Schleswig-Holsteins 4 = Offa-Bücher 27 (Neumünster 1974).

Hingst 1976: H. Hingst, Grabhügelfelder der jüngeren Bronze- und der frühen Eisenzeit aus Schleswig-Holstein. Offa 33, 1976, 66–122.

Hingst 1980: H. Hingst, Neumünster-Oberjörn. Ein Urnenfriedhof der vorrömischen Eisenzeit am Oberjörn und die vor- und frühgeschichtliche Besiedlung auf dem Neumünsteraner Sander. Urnenfriedhöfe Schleswig-Holsteins 5 = Offa-Bücher 43 (Neumünster 1980).

Hingst 1983: H. Hingst, Die vorrömische Eisenzeit Westholsteins. Urnenfriedhöfe Schleswig-Holsteins 8 = Offa-Bücher 49 (Neumünster 1983).

Hingst 1986: H. Hingst, Urnenfriedhöfe der vorrömischen Eisenzeit aus dem östlichen Holstein und Schwansen. Urnenfriedhöfe Schleswig-Holsteins 9 = Offa-Bücher 58 (Neumünster 1986).

Hingst 1989: H. Hingst, Urnenfriedhöfe der vorrömischen Eisenzeit aus Südostholstein. Urnenfriedhöfe Schleswig-Holsteins 12 = Offa-Bücher 67 (Neumünster 1989).

Hingst et al. 1990: H. Hingst/S. Hummel/H. Schutkowski, Urnenfriedhöfe aus Schleswig-Holstein. Leichen-

https://doi.org/10.2369/9783869354439.beyond-urnfields

branduntersuchungen und kulturkundliche Analyse. Germania 68, 1990, 167–222.

Ickerodt 2021: U. Ickerodt, Eine kurze Geschichte der archäologischen Denkmalpflege in Schleswig-Holstein. Natur- und Landeskunde 128, 2021, 151–155.

Jankuhn 1979: H. Jankuhn, Die römische Kaiserzeit und die Völkerwanderungszeit. In: K. W. Struve/H. Hingst/H. Jankuhn, Von der Bronzezeit bis zur Völkerwanderungszeit. Geschichte Schleswig-Holsteins 2 (Neumünster 1979) 249–416.

Knöpke 2005: St. Knöpke, Horizontale Sozialstrukturen auf den Urnenfriedhöfen der vorrömischen Eisenzeit in Schleswig-Holstein. In: J. Müller (ed.), Alter und Geschlecht in ur- und frühgeschichtlichen Gesellschaften. Tagung Bamberg 2004. Universitätsforschungen zur prähistorischen Archäologie 126 (Bonn 2005) 127–136.

Knorr 1910: F. Knorr, Friedhöfe der älteren Eisenzeit in Schleswig-Holstein (Kiel 1910).

Kühl 1966: I. Kühl, Beobachtungen an vorgeschichtlichen Leichenbränden aus Schleswig-Holstein. Offa 23, 1966, 130–140.

Lagler 1989: K. Lagler, Sörup II und Südensee. Zwei eisenzeitliche Urnenfriedhöfe in Angeln. Urnenfriedhöfe Schleswig-Holsteins 13 = Offa-Bücher 68 (Neumünster 1989).

Laux 2017: F. Laux, Die Friedhöfe der frühen und älteren vorrömischen Eisenzeit bei Ehlbeck, Gem. Rehlingen, Landkreis Lüneburg. Die Ergebnisse der Ausgrabungen in den Jahren 1971 und 1973. Die Urnenfriedhöfe in Niedersachsen 18 (Kerpen-Loogh 2017).

Lütjens 1996: I. Lütjens, Zur vorrömischen Eisenzeit in Nordfriesland. Die Gräberfelder von Ahrenshöft LA 36 und Achtrup LA 27. Offa 53, 1996, 27–136.

Lütjens 2014: I. Lütjens, Altes und Neues aus Bornhöved. Ein Bestattungsplatz für über 1000 Jahre. Archäologische Nachrichten aus Schleswig-Holstein 20, 2014, 30–35.

Mestorf 1877a: J. Mestorf, Urnenfriedhöfe in Schleswig-Holstein. Schriften des Naturwissenschaftlichen Vereins für Schleswig-Holstein 2, H. 2, 1877, 8–21.

Mestorf 1877b: J. Mestorf, Die vaterländischen Alterthümer Schleswig-Holsteins. Ansprache an unsere Landsleute (Hamburg 1877).

Mestorf 1885: J. Mestorf, Vorgeschichtliche Alterthümer aus Schleswig-Holstein. Zum Gedächtniss des fünfzigjährigen Bestehens des Museums vaterländischer Alterthümer in Kiel (Hamburg 1885).

Mestorf 1886: J. Mestorf, Urnenfriedhöfe aus Schleswig-Holstein (Hamburg 1886).

Mestorf 1898: J. Mestorf, Aus alten und ältesten Zeiten. V. Die Heimat 8, 1898, 157–163.

Michel 2005: Th. Michel, Studien zur Römischen Kaiserzeit und Völkerwanderungszeit in Holstein. Universitätsforschungen zur prähistorischen Archäologie 123 (Bonn 2005).

Morgenroth 1939: H. Morgenroth, Die vorgeschichtlichen Funde auf der Reichsautobahn Hamburg–Berlin im Bereich der Provinz Schleswig-Holstein. Nachrichtenblatt für Deutsche Vorzeit 15, 1939, 10–13.

Neergaard 1892: C. Neergaard, Meddelelser fra Nationalmuseets danske Sammling: Jernalderen. Aarbøger for Nordisk Oldkyndighed og Historie 7, 1892, 207–341.

Raddatz 1961a: K. Raddatz, Germanische Grabfunde der römischen Kaiserzeit aus Schleswig-Holstein. Inventaria archaeologica H. 10, Bl. D91–D100 (Bonn 1961).

Raddatz 1961b: K. Raddatz, Urnenfeldgrabungen in Angeln. Jahrbuch des Heimatvereins der Landschaft Angeln 25, 1961, 57–70.

Raddatz 1962: K. Raddatz, Untersuchungen eisenzeitlicher Urnenfelder in Schleswig-Holstein. Germania 40, 1962, 404–408.

Raddatz 1967: K. Raddatz, Das Wagengrab der jüngeren vorrömischen Eisenzeit von Husby, Kreis Flensburg. Offa-Bücher 20 (Neumünster 1967).

Raddatz 1974: K. Raddatz, Husby. Ein Gräberfeld der Eisenzeit in Schleswig 2. Katalog, Tafeln und Plan des Gräberfeldes. Urnenfriedhöfe Schleswig-Holsteins 4 = Offa-Bücher 30 (Neumünster 1974).

Raddatz 1981: K. Raddatz, Sörup I. Ein Gräberfeld der Eisenzeit in Angeln. Urnenfriedhöfe Schleswig-Holsteins 6 = Offa-Bücher 46 (Neumünster 1981).

Rangs-Borchling 1963: A. Rangs-Borchling, Das Urnengräberfeld von Hornbek in Holstein (2. Jahrhundert vor bis 2. Jahrhundert nach Christi Geburt). Offa-Bücher 18 (Neumünster 1963).

Reichstein 1989: J. Reichstein, Urnenfriedhöfe Schleswig-Holsteins. Forschungsstand. In: K. Lagler, Sörup II und Südensee. Zwei eisenzeitliche Urnenfriedhöfe in Angeln. Urnenfriedhöfe Schleswig-Holsteins 13 = Offa-Bücher 68 (Neumünster 1989) 5–8.

Reinbacher 1962: E. Reinbacher, Lanze. Ein Urnenfriedhof der älteren Eisenzeit im Herzogtum Lauenburg. Prähistorische Zeitschrift 40, 1962, 60–204.

Rindel 2015: P. O. Rindel, Tuegravpladserne fra førromersk jernalder ved Grøntoft. In: P. Foss/N. Algreen Møller (eds.), De dødes landskab. Grav og gravskik i ældre jernalder in Danmark. Arkæologiske Skrifter 13 (København 2015) 37–50.

Rochna 1940: O. Rochna, Ein ältereisenzeitlicher Urnenfriedhof in Albersdorf, Kr. Süder-Dithmarschen. Nachrichtenblatt für Deutsche Vorzeit 16, 1940, 98.

Rochna 1941/1942: O. Rochna, Bericht über Urnenfeldgrabungen in Schleswig. Offa 6/7, 1941/1942, 169–178.

Rothmann 1940: C. Rothmann, Urnenfriedhof bei Landwehr, Kr. Eckernförde. Nachrichtenblatt für Deutsche Vorzeit 16, 1940, 100.

Saggau 1986: H. E. Saggau, Bordesholm. Der Urnenfriedhof am Brautberg bei Bordesholm in Holstein. Urnenfriedhöfe Schleswig-Holsteins 10 = Offa-Bücher 60 (Neumünster 1986).

Schäfer 2015: S. Schäfer, Der Prähistoriker Gustav Schwantes (1881–1960). Leben und Werk im Kontext zeitgeschichtlichen und fachlichen Wandels. Universitätsforschungen zur prähistorischen Archäologie 263 (Bonn 2015).

Schemainda 2010: P. Schemainda, Ein Urnengräberfeld der Vorrömischen Eisenzeit, Römischen Kaiserzeit und Völkerwanderungszeit in Bad Segeberg. Archäologische Nachrichten aus Schleswig-Holstein 16, 2010, 46–48.

https://doi.org/10.2369/9783869354439.beyond-urnfields

Schlotfeldt 2016: S. Schlotfeldt, Ein struktureller Vergleich kaiser- und völkerwanderungszeitlicher Gräberfelder in Schleswig-Holstein. In: Niedersächsisches Institut für Historische Küstenforschung (ed.), Aktuelle Forschungen an Gräberfeldern des 1. Jahrtausends n. Chr. Siedlungs- und Küstenforschung im südlichen Nordseegebiet 39 (Rahden/Westf. 2016) 13–24.

Schutkowski/Hummel 1991: H. Schutkowski/S. Hummel, Vorgeschichtliche Bevölkerungen in Schleswig-Holstein. Leichenbranduntersuchungen von Urnenfriedhöfen Mittel- und Ostholsteins im diachronen Vergleich. Offa 48, 1991, 133–262.

Schwabedissen 1938: H. Schwabedissen, Der Urnenfriedhof auf dem „Hesterbarg" in Drage, Kreis Steinburg. Offa 3, 1938, 144–152.

Schwantes 1911: G. Schwantes, Die ältesten Urnenfriedhöfe bei Uelzen und Lüneburg. Die Urnenfriedhöfe in Niedersachsen 1 (Hannover 1911).

Schwantes 1939: G. Schwantes, Die Entwicklung der vorgeschichtlichen Forschung in Schleswig-Holstein vom Jahre 1929–1939. Kieler Blätter 1939, 335–351.

Schwantes 1940a: G. Schwantes, Johanna Mestorf. In: P. Ritterbusch/H. Löhr/O. Scheel/G. E. Hoffmann (eds.), Festschrift zum 275jährigen Bestehen der Christian-Albrechts-Universität Kiel (Leipzig 1940) 309–331.

Schwantes 1940b: G. Schwantes, Die Untersuchung der Urnenfriedhöfe in Schleswig-Holstein. Nachrichtenblatt für Deutsche Vorzeit 16, 1940, 73–75.

Terkildsen 2015: K. F. Terkildsen, Gravpladsen Årupgård som kilde til social stratifikation i førromersk jernalder. In: P. Foss/N. Algreen Møller (eds.), De dødes landskab. Grav og gravskik i ældre jernalder in Danmark. Arkæologiske Skrifter 13 (København 2015) 51–70.

Virchow 1886: R. Virchow, Besprechung J. Mestorf, Urnenfriedhöfe in Schleswig-Holstein (Hamburg 1886). Zeitschrift für Ethnologie 18, 1886, 289–290.

Wahl 1988: J. Wahl, Süderbrarup. Ein Gräberfeld der römischen Kaiserzeit und Völkerwanderungszeit in Angeln 2. Anthropologische Untersuchungen. Urnenfriedhöfe Schleswig-Holsteins Band 11,2 = Offa-Bücher 64 (Neumünster 1988).

Willroth 1992: K.-H. Willroth, Untersuchungen zur Besiedlungsgeschichte der Landschaften Angeln und Schwansen von der älteren Bronzezeit bis zum frühen Mittelalter: eine Studie zur Chronologie, Chorologie und Siedlungskunde. Siedlungsarchäologische Untersuchungen in Angeln und Schwansen 1 = Offa-Bücher 72 (Neumünster 1992).

Angelika Abegg-Wigg
Stiftung Schleswig-Holsteinische Landesmuseen Schloss Gottorf
Museum für Archäologie Schloss Gottorf
Schleswig
Germany
angelika.abegg-wigg@landesmuseen.sh

https://doi.org/10.2369/9783869354439.beyond-urnfields

Burials of the Pre-Roman Iron Age in Schleswig-Holstein. A short overview

Ingo Lütjens

Keywords: Urn cemeteries, stone structures, painted pottery, Pre-Roman Iron Age, Schleswig-Holstein

Abstract: During the Pre-Roman Iron Age in Schleswig-Holstein, the deceased were burned. Burial of the remains took place in urns either in flat graves or under or within a small barrow, respectively. During the Early Pre-Roman Age the urn was usually placed in a substantial stone packing, but afterwards this stone protection became less important. Especially during the older phase many burials, particularly to the middle and the south of the country, were marked by stone constructions above ground level. Gender-specific cemeteries represent a culture-specific phenomenon, as well as the use of painted pottery vessels as urns at the beginning of the Pre-Roman Iron Age.

Introduction[1]

During the Pre-Roman Iron Age in Schleswig-Holstein, the deceased were burned and the cremation remains mostly buried in urns. The urn cemeteries have been, and still are, often the subject of archaeological investigations, and some of them are nearly completely excavated. Thanks to the efforts of H. Hingst, several urn cemeteries have been published in the special series 'Urnenfriedhöfe Schleswig-Holsteins' (*Offa-Bücher*). Best known are the two very large cemeteries of Schwissel, Kr. (German: *Kreis* = district) Segeberg, site no. LA 1, with more than 2,800 burials (Behrends 1968; Krambeck 1992), and Groß Timmendorf, Kr. Ostholstein, site no. LA 17, with more than 1,000 burials (Hingst 1989; Fischer 2000). In addition, there are several medium-sized cemeteries with 500–1,000 burials and many smaller cemeteries with less than 100 burials. The occasional large number of burials is due to the long use-periods of some cemeteries, and the more than 2,800 Pre-Roman Iron Age burials at Schwissel are due to the continual use of the site for at least four centuries (*c.* 500–100 BCE). Small and large contemporary cemeteries are sometimes found in close proximity to each other. The smaller cemeteries with less than 500 burials were used for shorter periods of 50–200 years, but so were some of the larger cemeteries with more than 500 burials.

Calculations show that a population of a minimum of 200 individuals lived in the area of Schwissel in the Early to Late Pre-Roman Iron Age. The population around Groß Timmendorf is estimated at a minimum of 70–100 individuals. According to the current state of research, the very large cemeteries represent several settlements belonging to local communities (cf. Lütjens 2010; Ettel 2014, 198).

1 Information in this paper has already been partly published: Lütjens 2020.

https://doi.org/10.2369/9783869354439.beyond-urnfields

The burial traditions of the Pre-Roman Iron Age were quite diverse with occasional regional differences (cf. Hingst 1979; Lütjens 1996). Flat graves are the most dominant form of burial, but there are also secondary burials in older barrows and primary burials below small mounds of only a few metres diameter, particularly from the Early Pre-Roman Iron Age. During this early phase, the urn was deposited in a burial pit and surrounded by a stone packing. The urn was often placed on top of one or more stones and covered by a capstone or another ceramic vessel (bowl, larger vessel part). As a rule of thumb, stone constructions were less frequently used in burial constructions in the Later Pre-Roman Iron Age.

Burials found mainly in the east and south of Schleswig-Holstein were marked above ground by stone paving (Fig. 1), stone rings (Fig. 2), stone circles, rectangular stone settings and occasionally by circular or rectangular ditches (Figs. 3–4). It is not certain whether the ditches were visible above ground; they may have represented the remains of barrow enclosures, perhaps similar to the palisade-like wooden constructions at Aarupgaard urnfield (cf. Jørgensen 1975). Most of the burial markings are not preserved today due to agricultural activity and, in many cases, it remains an open question whether burials were once marked by stones or other means. Burials with and without stone markings are, however, found in close proximity and at the same depth, demonstrating that both options were in use. Although burials were often placed close to each other, an absence of overlapping indicates another form of marking above ground, perhaps in the form of easily perishable materials, e.g. wood, small hedges or bushes.

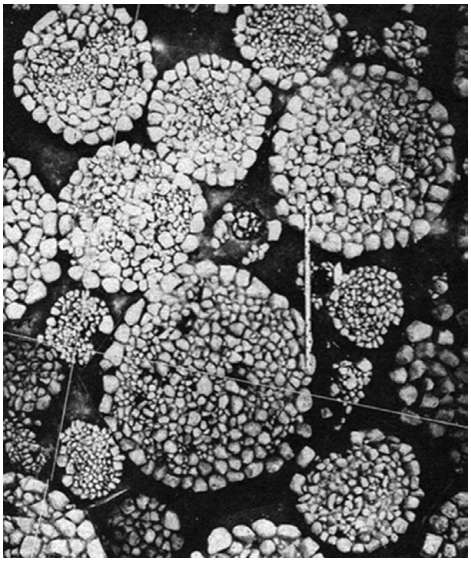


Fig. 1. Stone paving at Groß Timmendorf, Kr. Ostholstein, LA 17 (after Hingst 1989, Karte 6a).

Fig. 2. Stone ring at Ascheberg, Kr. Plön, LA 30 (photo L. Schlisio, © Archäologisches Landesamt Schleswig-Holstein).

In east Holstein, we find urn cemeteries with preserved stone structures on the surface, which is unique for northern Germany. One of these is the urn cemetery at Timmberg near Grebin (Kr. Plön, site no. LA 16). In the early 1950s, 24 stone structures from a presumably large cemetery were documented near two barrows from the Early Bronze Age (Fig. 5; cf. Hucke 1954). Because this is an extraordinarily well-preserved site, only a few stone settings were partly excavated and the monument was kept as intact as possible. The cemetery included 22 round structures with an inner diameter of 2–5 m, although two larger structures measure 12.3 and 15.8 m in diameter, respectively. The round

https://doi.org/10.2369/9783869354439.beyond-urnfields

Fig. 3. Circular ditch with interruptions at Bornhöved, Kr. Segeberg, LA 115 (photo I. Lütjens, © Archäologisches Landesamt Schleswig-Holstein).

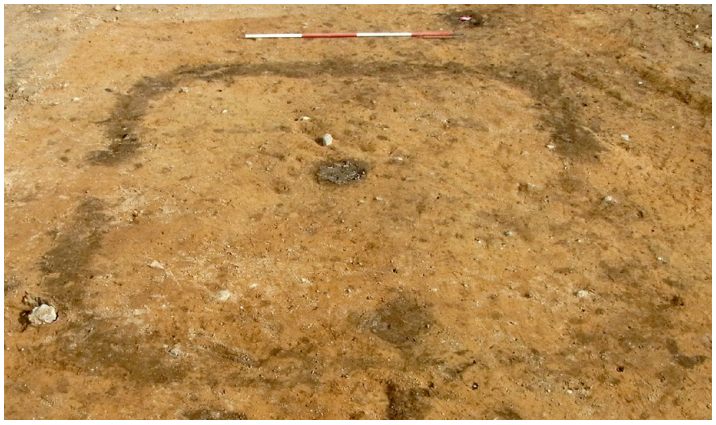


Fig. 4. A nearly square ditch with an interruption at Bornhöved, Kr. Segeberg, LA 115 (photo I. Lütjens, © Archäologisches Landesamt Schleswig-Holstein).

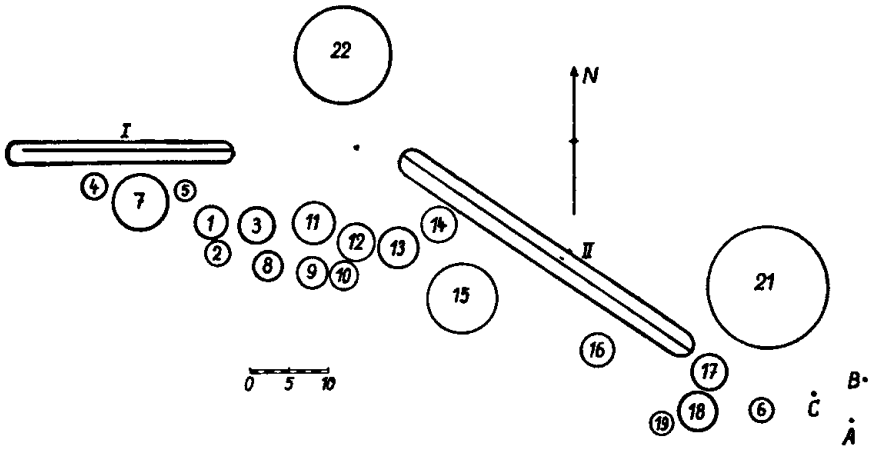


Fig. 5. Stone structures at Grebin, Kr. Plön, LA 16 (after Hucke 1954, 59 Abb. 6).

structures consisted of stone circles with large boulders around stone paving, as, for example, in Groß Timmendorf (cf. Fig. 1). The cemetery also contained two long, rectangular structures measuring 3 m in width and 29 and 45 m in length, respectively (Fig. 6). The rectangular structures have a frame of larger boulders with a stone row in the middle. One of the structures was excavated and in the middle of this was found a single urn burial. The interpretation of these structures in relation to the round structures remains uncertain, but because both types are found in connection with Early Pre-Roman Iron Age burials they are probably a form of burial marker. We do not know why

https://doi.org/10.2369/9783869354439.beyond-urnfields

Fig. 6. Rectangular structure at Grebin, Kr. Plön, LA 16 (photo K. Hucke, © Kreismuseum Plön).

this unusual form was chosen at Grebin, but comparable rectangular and round stone markings are also found at another large urn cemetery – Högsdorf, Kr. Plön, LA 30 – just a few kilometres away. Perhaps the rectangular structures at Grebin and Högsdorf represent a special status of the deceased buried there, although the urn grave documented within the rectangular structure at Grebin does not stand out from the remaining burials at the site.

In the course of the Pre-Roman Iron Age, a peculiarity of the Jastorf culture emerged that is difficult to explain. This is the occurrence of the first gender-specific urn cemeteries, i.e. men and women were in some instances buried separately at different cemeteries, or one gender was only represented by a few individuals at a particular cemetery (Krambeck 1992; Lütjens 1996). The phenomenon has been verified by osteological analyses and analyses of gender-related grave goods and it prevailed until the Roman Iron Age. The majority of cemeteries from the Pre-Roman Iron Age obviously still had mixed-gender burials (cf. Hingst et al. 1990; Schutkowski/Hummel 1991; Krambeck 1992, 25; Fischer 2000).

Grave content

Graves from the Early Pre-Roman Iron Age are typically very sparsely furnished, with the majority only containing the cremated human remains. Aside from single dress pins and belt equipment of bronze or more rarely iron, there are very few other objects, such as eyelet rings, spiral jewellery and plate brooches. During the Late Pre-Roman Iron Age, metal furnishings became more common and, in contrast to the Early Pre-Roman Iron Age, iron came to play a larger role than bronze. The iron objects were initially primarily dress pins, which were later replaced by fibulas and more complex belt equipment, e.g. Holstein belts (*Holsteiner Gürtel*). At the end of the Pre-Roman Iron Age, iron knives, polishing stones and bone pins became more common and weapon graves started to appear. There are, however, still many unfurnished graves, particularly from the earlier part of the Pre-Roman Iron Age. An exception to this is a wagon grave from Husby (Kr. Schleswig-Flensburg), which contained both wagon parts and a bronze cauldron. The furnishings are all in a poor state of preservation, which makes it difficult to detect social differences based on burial goods.

Eleven Early Pre-Roman Iron Age urns with a painted exterior appear to be very "exotic" for the area (Fig. 7). The urns were all found in northern and middle Holstein, six of them at the urn cemetery at Jevenstedt, Kr. Rendsburg-Eckernförde. Painted pottery from the Pre-Roman Iron Age

https://doi.org/10.2369/9783869354439.beyond-urnfields

is rare in northern Germany and further finds have so far only been noted in Lower Saxony. The custom was more widespread in the central German Uplands region to the south, indicating direct relations between these areas (Hingst 1979, 184–185).

Fig. 7. Painted urn from Todesfelde, Kr. Segeberg, LA 31 (photo L. Hermannsen, © Archäologisches Landesamt Schleswig-Holstein).

Acknowledgements

The author would like to thank Gundula Lidke for translating his text into English.

Bibliography

Behrends 1968: R.-H. Behrends, Schwissel. Ein Urnengräberfeld der vorrömischen Eisenzeit aus Holstein. Offa-Bücher 22 (Neumünster 1968).

Ettel 2014: P. Ettel, Das Gräberfeld von Mühlen Eichsen, Mecklenburg-Vorpommern. Zum Stand der Ausgrabung, Aufarbeitung und Auswertung. In: J. Brandt/B. Rauchfuß (eds.), Das Jastorf-Konzept und die vorrömische Eisenzeit im nördlichen Mitteleuropa. Beiträge der internationalen Tagung zum einhundertjährigen Jubiläum der Veröffentlichung „Die ältesten Urnenfriedhöfe bei Uelzen und Lüneburg“ durch Gustav Schwantes, 18.–22.05.2011 in Bad Bevensen. Veröffentlichung des Archäologischen Museums Hamburg und Stadtmuseums Harburg 105 (Hamburg 2014) 169–204.

Fischer 2000: L. Fischer, Das Gräberfeld der vorrömischen Eisenzeit von Groß Timmendorf, Kr. Ostholstein. Untersuchungen zu Chronologie, räumlicher Struktur und gesellschaftlichem Wandel. Unpubl. PhD thesis, Christian-Albrechts-University Kiel (Kiel 2000).

Hingst 1979: H. Hingst, Die vorrömische Eisenzeit. In: K. W. Struve/H. Hingst/H. Jankuhn, Von der Bronzezeit bis zur Völkerwanderungszeit. Geschichte Schleswig-Holsteins 2 (Neumünster 1979) 146–247.

Hingst 1989: H. Hingst, Urnenfriedhöfe der vorrömischen Eisenzeit aus Südholstein. Offa-Bücher 67 (Neumünster 1989).

Hingst et al. 1990: H. Hingst/S. Hummel/H. Schutkowski, Urnenfriedhöfe aus Schleswig-Holstein. Leichen-

https://doi.org/10.2369/9783869354439.beyond-urnfields

branduntersuchungen und kulturkundliche Analyse. Germania 68(1), 1990, 167–222.

Hucke 1954: K. Hucke, Das Gräberfeld der älteren Jastorfzeit auf dem Timmberge bei Breitenstein, Kreis Plön. Offa 13, 1954, 55–62.

Jørgensen 1975: E. Jørgensen, Tuernes mysterier. Skalk 1975(1), 1975, 3–10.

Krambeck 1992: K. Krambeck, Das Brandgräberfeld von Schwissel, Kreis Segeberg. Studien zum archäologischen und anthropologischen Befund. Unpubl. Magistral thesis, Hamburg University (Hamburg 1992).

Lütjens 1996: I. Lütjens, Zur vorrömischen Eisenzeit in Nordfriesland. Die Gräberfelder von Ahrenshöft LA 36 und Achtrup LA 27. Offa 53, 1996, 27–136.

Lütjens 2010: I. Lütjens, Siedlungen aus der Vorrömischen Eisenzeit in Schleswig-Holstein. In: M. Meyer (ed.), Haus – Gehöft – Weiler. Siedlungen der vorrömischen Eisenzeit im nördlichen Mitteleuropa. Internationale Tagung an der Freien Universität Berlin vom 10.–23. März 2009. Berliner Archäologische Forschungen 8 (Rahden/Westf. 2010) 309–320.

Lütjens 2020: I. Lütjens, Zur Vorrömischen Eisenzeit in Schleswig-Holstein. Archäologische Nachrichten Schleswig-Holstein 26, 2020, 38–43.

Schutkowski/Hummel 1991: H. Schutkowski/S. Hummel, Vorgeschichtliche Bevölkerungen in Schleswig-Holstein. Leichenbranduntersuchungen von Urnenfriedhöfen Mittel- und Ostholsteins im diachronen Vergleich. Offa 48, 1991, 133–262.

Ingo Lütjens
Archäologisches Landesamt Schleswig-Holstein (ALSH),
Außenstelle Bad Segeberg
Bad Segeberg
Germany
ingo.luetjens@alsh.landsh.de

https://doi.org/10.2369/9783869354439.beyond-urnfields

Short report on the excavation of the Early Iron Age burial site of Borgstedt in the Rendsburg-Eckernförde district

Ringo Klooß

Keywords: Urns, painted pottery, Pre-Roman Iron Age

Abstract: During archaeological investigations at Borgstedt in the Rendsburg-Eckernförde district in Schleswig-Holstein an entire burial ground of the Pre-Roman Iron Age was documented. The cemetery consisted of 90 burials – 87 urn burials and three cremation deposits without pottery. Most urns were placed in stone settings or on stones directly. The pottery vessels represent several types, among them there is also a painted exemplar, but were mainly poorly preserved. Grave furnishings include rings and ring fragments as well as dress pins. Urn no. 66 stands out with grave goods in form of a Pauken-*fibula, several beads and metal objects, perhaps indicating social differentiation within the burial ground.*

Introduction

The municipality of Borgstedt is located in the northwest of the Kr. (German: *Kreis* = district) Rendsburg-Eckernförde, at the transition of the Weichselian terminal moraine to the Schleswig-Holsteinian Geest (Fig. 1a). The predominant soils in this transition area are a mosaic of glacial till sands, till loams and glacial fluviatile sands and gravels with turf iron ore deposits. About 800 m north of the excavation area, the Duvenstedter Berge rise as a soft glacial terminal moraine.

The archaeological investigation at Borgstedt LA 72 was prompted by a planned building project, and in the course of the preliminary investigation 14 search sections were made within an area of *c.* 10 ha. Several urn burials were uncovered in the southwestern part of the preliminary investigation area. Approximately one fifth of the preliminary survey area was set aside for the main survey, which was carried out in June 2020.

Burial forms

The entire burial ground was documented in the course of the excavation. The main burial concentration is found in the southwest of the excavation area and from there urn graves spread gradually towards the northeast at increasing distances (Fig. 1b). The 90 burials consist of 87 urn graves and three cremation deposits without pottery. The majority of the urns stood within stone settings and were placed on one or more stones. Only five graves had neither stone protection nor base stones. Flint was used in the stone setting in six graves, and quartzite hammerstones in another two graves.

https://doi.org/10.2369/9783869354439.beyond-urnfields

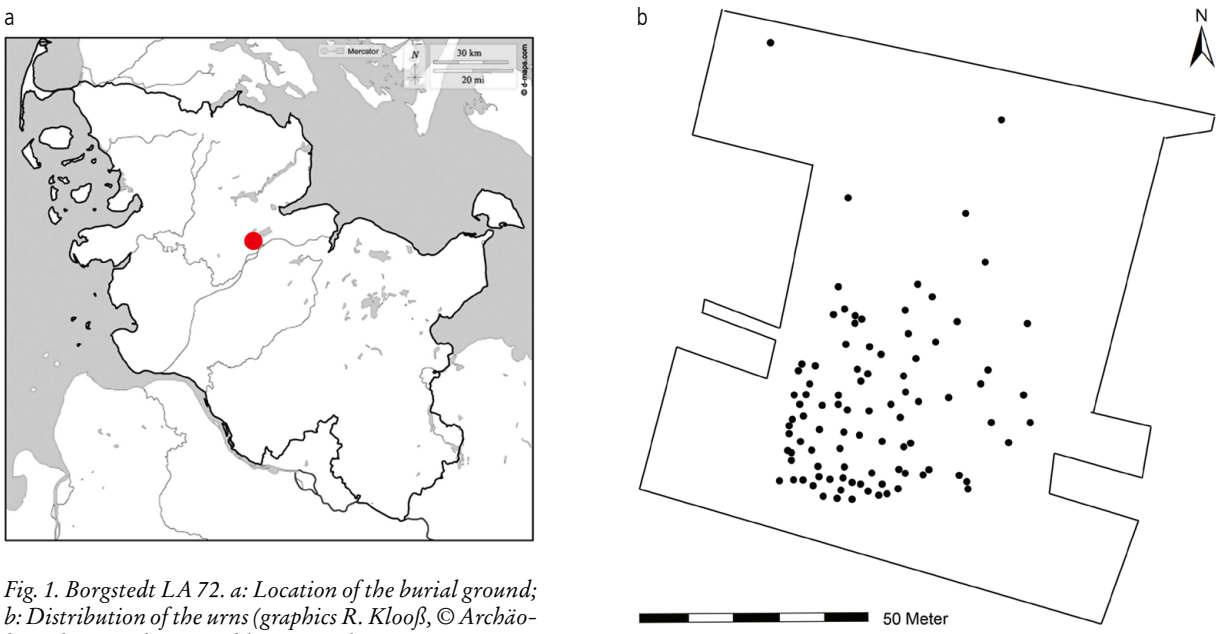


Fig. 1. Borgstedt LA 72. a: Location of the burial ground; b: Distribution of the urns (graphics R. Klooß, © Archäologisches Landesamt Schleswig-Holstein).

Funerary vessels

The state of preservation of the urns was predominantly poor to very poor. Only eleven urns were well to very well, which means completely, or almost completely, preserved. The vessels are all terrine- and vase-shaped, two- and three-parted with a conical or cylindrical neck. Most of them have a clearly defined shoulder or groove defining the transition between vessel body and neck. Seven vessels represent the Todendorf type. These vessels are all heavily shattered and incomplete.

In one case, a smaller vessel was found inside an urn. At the bottom of another urn, numerous seed imprints of *Polygonum lapathifolium* or *Polygonum persicaria* were discovered (Fig. 2a).

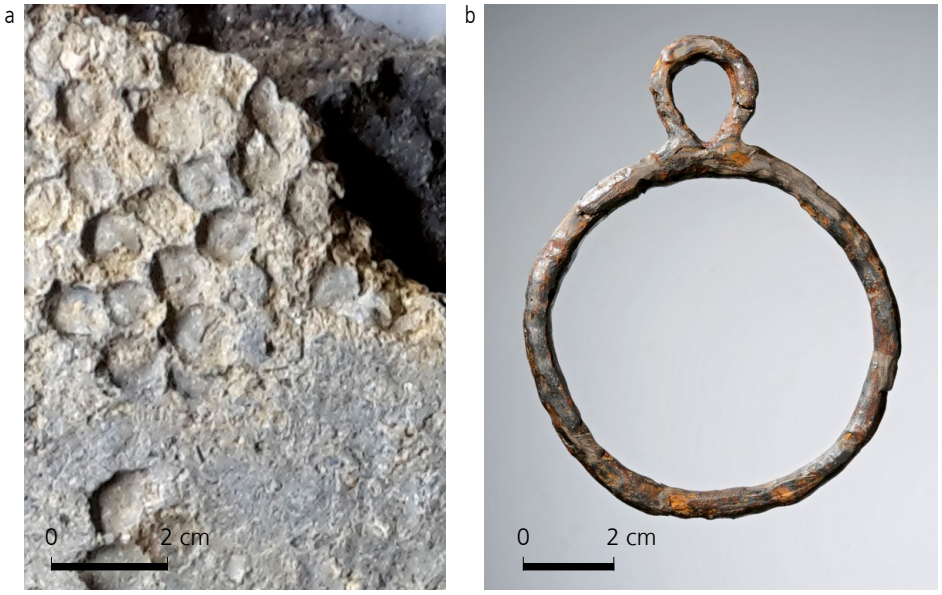


Fig. 2. Borgstedt LA 72. a: Imprints of Polygonum *seeds at the bottom of an urn; b: Iron eyelet ring (photos R. Klooß [a], L. Hermannsen [b], © Archäologisches Landesamt Schleswig-Holstein).*

https://doi.org/10.2369/9783869354439.beyond-urnfields

Painted pottery

One urn from Borgstedt shows decorations in the form of a chevron pattern. The vessel's shoulder is decorated with a broad band of incised rhombuses, of which each side is outlined by three striations. The upper part of the ornamentation band is marked by a groove and the lower part by a striation. The band of incised ornamentation is filled with a red colour (Fig. 3). The vessel is heavily shattered and incomplete, but it is the eleventh painted vessel known from Schleswig-Holstein in all (Hingst 1974, 51–63, supplements 1–4; Lütjens 2013, 42–43). The area around Rendsburg seems to be established as a centre of this kind of pottery finds, as nine examples of painted pottery have been found at six sites located within a 10 km radius. The Borgstedt vessel is the northernmost known example and the first example from the Schleswig area.

The geometric ornamental style in combination with painting was a short-lived phenomenon at the beginning of the Pre-Roman Iron Age. The motifs found in Schleswig-Holstein show clear similarities to Late Hallstatt pottery from southern and central Germany and demonstrate cultural influences moving from south to north. This influence is also evidenced in the distribution of the *Pauken*-fibulae (*Paukenfibeln*), which extends from southwestern Germany to the Franconian Alps and from there through Hesse and Lower Saxony to Mecklenburg-Western Pomerania and Schleswig-Holstein (Bergmann 1958, map 1).

Fig. 3. Borgstedt LA 72. Painted pottery (photo L. Hermannsen, © Archäologisches Landesamt Schleswig-Holstein).

Grave content

Grave goods were recovered from 24 out of the 90 burials in total. Twelve of the 25 better-preserved urns contained grave goods. Based on this, probably about half of the burials must originally have contained grave goods. Fragments of eyelet rings (*Ösenringe*), one of them made of iron (Fig. 2b), were found in six urns, and fragments of bronze rings of various sizes were found in eight urns. The most frequent find categories are bronze and iron dress pin fragments. The heads of these were preserved in only a few cases. These include, for example, iron pins with a ball-shaped head (*Gekröpfte Kugelkopfnadeln*), iron pins with a nail-shaped head (*Nagelkopfnadeln*), an iron pin with a coiled head (*Rollenkopfnadel*) and an iron pin with a bronze bomb-shaped head (*Bombennadel*). Other find categories are belt hooks, tubes of spirally-coiled bronze ribbons and chain fragments. In addition, some heavily melted or corroded iron and bronze fragments were found. One bronze fragment probably originates from a hollow ring.

https://doi.org/10.2369/9783869354439.beyond-urnfields

The grave goods from the completely preserved urn no. 66 clearly stand out from the furnishings found in the other urns, both in quantity and in quality. The urn contained what appears to be a double *Pauken*-fibula of type VI/3 with a broken base (Fig. 4a). This fibula type dates to the HaD3 phase, and its distribution from southern Germany via Hesse and Lower Saxony to Schleswig-Holstein shows the path of the Late Hallstatt and Early La Tène cultural influence (Bergmann 1958, figs. 3; 10), which is similar to what is evidenced by the painted pottery. The urn also contained the only antler or bone bead found at Borgstedt, and additionally two melted glass beads and twelve fragments of such beads (Fig. 4b). One of the glass beads is decorated with a zigzag pattern. Furthermore, the urn contained numerous fragments of tubes made of spirally-coiled bronze bands, a fragmented spoke-wheel-shaped pendant (Fig. 5a) and an eyelet ring (Fig. 5b). The eyelet ring weighs 105 g and is three times heavier than comparable specimens from the site.

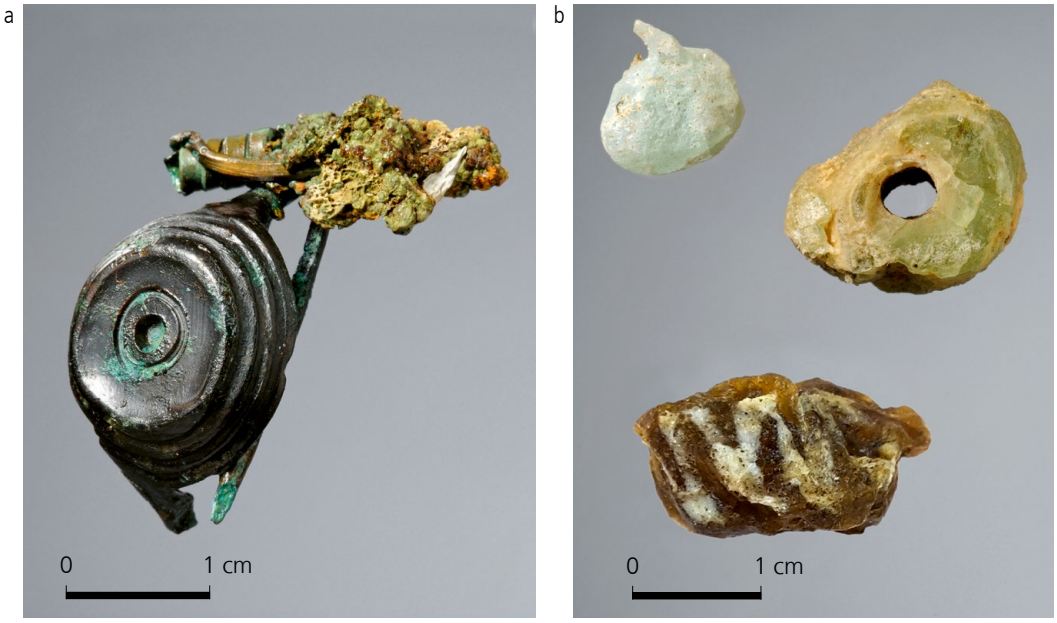


Fig. 4. Borgstedt LA 72. Grave goods from urn no. 66 – a: Pauken-*fibula; b: Glass beads (photos L. Hermannsen, © Archäologisches Landesamt Schleswig-Holstein).*

Chronology

On the basis of the grave goods, the burial site dates to stages 1b and part of 1c of the Pre-Roman Iron Age, according to Hingst (1974). No grave goods from phase Hingst 1a, which is parallel to the final Bronze Age Period Montelius VI and Late Hallstatt D (Hingst 1974, 67–71), were found in Borgstedt. In absolute chronological terms, the Borgstedt burial site dates to the 5th and to part of the 4th century BC. The distribution of the earlier eyelet rings and the later Todendorf-type funerary vessels seems to indicate that the burial site developed horizontally from south to north.

Summary

The Borgstedt site is located in a region where two trade routes cross. Here, the north-south oriented *Ochsenweg* / *Heerweg* crosses the river Eider, which flows into the North Sea. It is possible that the frequent occurrence of southern influences in the form of painted pottery in this region is the result

https://doi.org/10.2369/9783869354439.beyond-urnfields

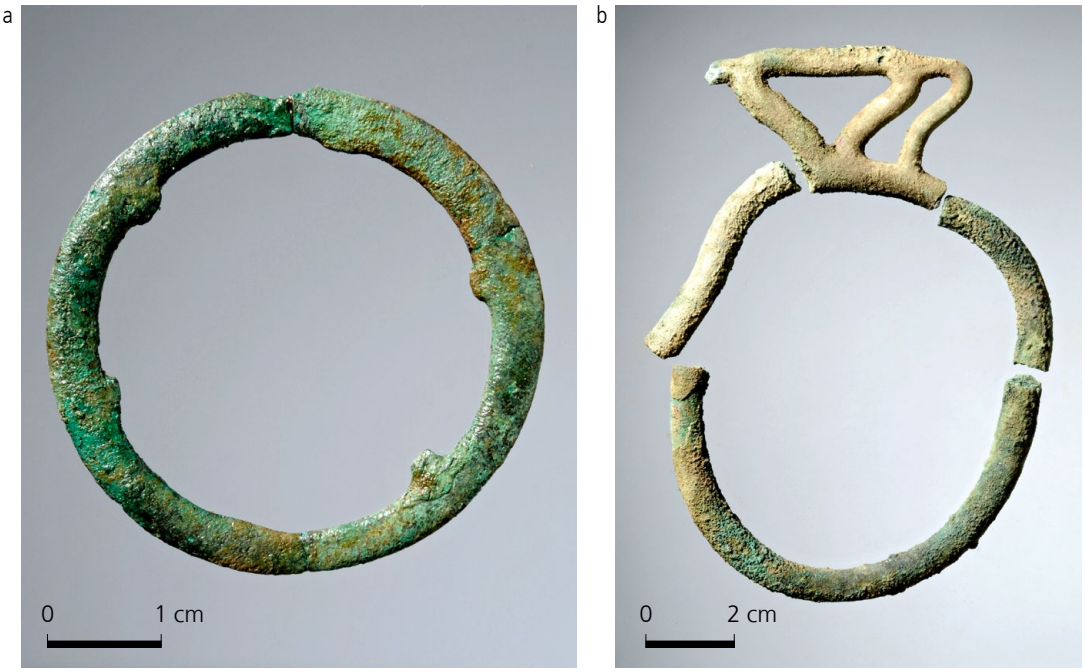


Fig. 5. Borgstedt LA 72. Grave goods from urn no. 66 – a: Spokewheel-shaped pendant; b: Eyelet ring (photos L. Hermannsen, © Archäologisches Landesamt Schleswig-Holstein).

of this favourable infrastructural location. Hingst assumed that the art of vessel painting emerged together with the iron extraction technology and that the bearers of these innovations were probably ironsmiths (Hingst 1974, 62). It is possible that the iron eyelet ring found at Borgstedt also points to this influence, as this type of artefact is usually made of bronze. The extremely richly equipped urn no. 66 indicates a social differentiation of the population. Its grave goods differ from those of the other burials, both qualitatively and quantitatively, and attest southern influences at Borgstedt. This refutes the statement that social differentiation cannot be determined based on grave goods in the Early Pre-Roman Iron Age (Hässler 1991, 226).

Bibliography

Bergmann 1958: J. Bergmann, Entwicklung und Verbreitung der Paukenfibeln. Jahrbuch des Römisch-Germanischen Zentralmuseums Mainz 5, 1958, 18–77.

Hässler 1991: H.-J. Hässler, Die Vorrömische Eisenzeit. In: H.-J. Hässler (ed.), Ur- und Frühgeschichte in Niedersachsen (Stuttgart 1991) 193–237.

Hingst 1974: H. Hingst, Jevenstedt – Ein Urnenfriedhof der älteren vorrömischen Eisenzeit im Kreis Rendsburg-Eckernförde, Holstein. Offa-Bücher 27 (Neumünster 1974).

Lütjens 2013: I. Lütjens, Frühe Häuser und viele Gräber bei Todesfelde. Archäologische Nachrichten Schleswig-Holstein 19, 2013, 39–43.

Ringo Klooß
Archäologisches Landesamt Schleswig-Holstein
Schleswig
Germany
ringo.klooss@alsh.landsh.de

https://doi.org/10.2369/9783869354439.beyond-urnfields

https://doi.org/10.2369/9783869354439.beyond-urnfields

The urnfield phenomenon in Schleswig-Holstein: New insights into the chronology and hypotheses

Stefanie Schaefer-Di Maida and Jutta Kneisel

Keywords: Treatment of the dead, grave construction, northern Germany, transformation processes

Abstract: For the first time in the history of archaeological research in Schleswig-Holstein, a cemetery has been absolutely dated on a large scale. The burial ground at the site of Mang de Bargen near Bornhöved was used from the Late Neolithic until the Pre-Roman Iron Age. Most of the burials belong to the Urnfield period and were interred within the Late Neolithic and the Older Bronze Age (1800–1300/1200 BCE) burial mound areas. Due to the long period of cemetery use, the transition from inhumation to cremation as well as the change to the new type of grave construction (urn) and grave furnishings can be traced at this site. In addition, thanks to extensive dating, statements can be made on the duration of the urn cemeteries. Moreover, absolute dates from other sites in Schleswig-Holstein, which have also been dated within the project, together with the data from Mang de Bargen provide new insights into the distribution of the urnfield phenomenon in the region. Furthermore, the anthropological investigations performed as part of the project on the remains at all of these sites show interesting results in the selection of the urn type and the connection between grave goods and age groups.

Introduction

The research presented here is part of subproject D3 of the CRC 1266 'Scales of Transformation – Human-Environmental Interaction in Prehistoric and Archaic Societies' research project. In this project, Schleswig-Holstein forms the beginning of a transect of several regions via Mecklenburg-Western Pomerania to Poland, which are investigated with regard to transformations in the Bronze Age. One such decisive turning point in the Bronze Age is the change in burial practice around 1300 BCE, which is mostly associated with the urnfield phenomenon (Falkenstein 2017, 77–96). A change in funerary customs is a gradual and profound process (Hofmann 2008; Schaefer-Di Maida 2023); the particular funeral customs of a community represent an important area of life that is difficult to change. It is an aspect that presupposes a conviction and certainty about the relevance of custom and is associated with ritualised actions, such as the expression of mourning (e.g. Znoj 2012, 17–18). Accordingly, there must have been important or acceptable reasons that triggered a change in burial customs that should not be regarded as individualised, but as a common, almost simultaneous change of perception. The new treatment of the dead was not an invention of one society, but a general phenomenon that took place in Europe (Fokkens 1997, 360–373), especially in southern Germany (Kristiansen 1998; Harding 2000, 73–123; Falkenstein 2017). Based on the literature, this change can be described for the Nordic Circle (southern Scandinavia and northern Germany) mostly only on the basis of time

https://doi.org/10.2369/9783869354439.beyond-urnfields

periods. It falls into (Montelius') Period III, which dates between 1300 and 1100 BCE. This is an extremely long period in which to establish the time of a transformation, because we are limited by our archaeological finds classification, which does not necessarily accurately reflect when the transition actually occurred. To address this dilemma, the graves of the Mang de Bargen cemetery were examined and comprehensively dated as part of the project (Schaefer-Di Maida 2023). In addition, a few selected Period III burials all over Schleswig-Holstein were dated in order to obtain a comprehensive picture for the region and to be able to compare and evaluate the transition process on different spatial levels. Additional anthropological analyses also provide evidence for social differentiations that most likely accompanied the change in burial practice (Storch 2023). Further changes in Schleswig-Holstein's find spectra, hoard rites, and house construction show that the changes in the treatment of the dead and in grave construction were part of a complex transformation process.

Mang de Bargen site

The site is located in southeastern Schleswig-Holstein on the Cimbrian Peninsula, in the district (German: *Kreis* [Kr.]) of Segeberg, about 30 km south of Kiel (Fig. 1). In the Bronze Age, burial mounds were built there on the edge of an end moraine, clustered into groups. They were recorded in the 1960s as part of the archaeological survey of the country. The Mang de Bargen cemetery forms one of the twenty groups of barrows located along the end moraine, and these barrows were mapped as barrow group 'K' by H. Schwerin von Krosigk in 1976, but only partially described in more detail. Thereby, 23 barrows and one long barrow were recorded for this cemetery with regard to preservation, dimensions, and height visible above ground (Schwerin von Krosigk 1976, 106–108). During excavations in the course of modern gravel extraction, 18 barrows and one urnfield were finally verified. Most of the site had already been excavated between 2004 and 2014 by the State Archaeological Office (Lütjens 2008, 30–35; 2014; Burkhardt 2014). With the investigations within the above-mentioned subproject of the CRC between 2016 and 2019, work on the site could be completed and data finally analysed (Schaefer-Di Maida 2023). The Mang de Bargen site is situated not far from two locations of pollen assemblages that were used for palynological analyses. At a maximum distance of 500 m as the crow flies from the burial ground, a peat hole (MDB 1 profile) allows conclusions to be drawn about local landscape developments (Fig. 1). Furthermore, a laminated pollen profile is available from Lake Belau, which is located approximately 3–4 km as the crow flies from the Mang de Bargen site. The archaeological data are thus excellently complemented by ecological data, which allow a landscape reconstruction in precise time slices.

The burial mounds were built between the Late Neolithic and the end of the Older Bronze Age (1800–1300/1200 BCE). During the Younger Bronze Age (1300/1200–500 BCE) extensive secondary burial took place around some of these barrows. These latter burials already give the impression of urnfields, as they are highly clustered and sometimes appear in small groups. A 'proper' urn burial ground is located to the southeast between three barrows and dates to the pre-Roman Iron Age. The area around the cemetery was also used for cooking-stone pits and other activities; therefore, the cemetery was not isolated but embedded in a frequently-used landscape (Schaefer-Di Maida 2018).

Bronze Age

Burial development

Of the 18 excavated burial mounds at the site, three can be assigned to the Late Neolithic and 15 to the Older Bronze Age. The majority of the primary graves are inhumations, mostly buried in

https://doi.org/10.2369/9783869354439.beyond-urnfields

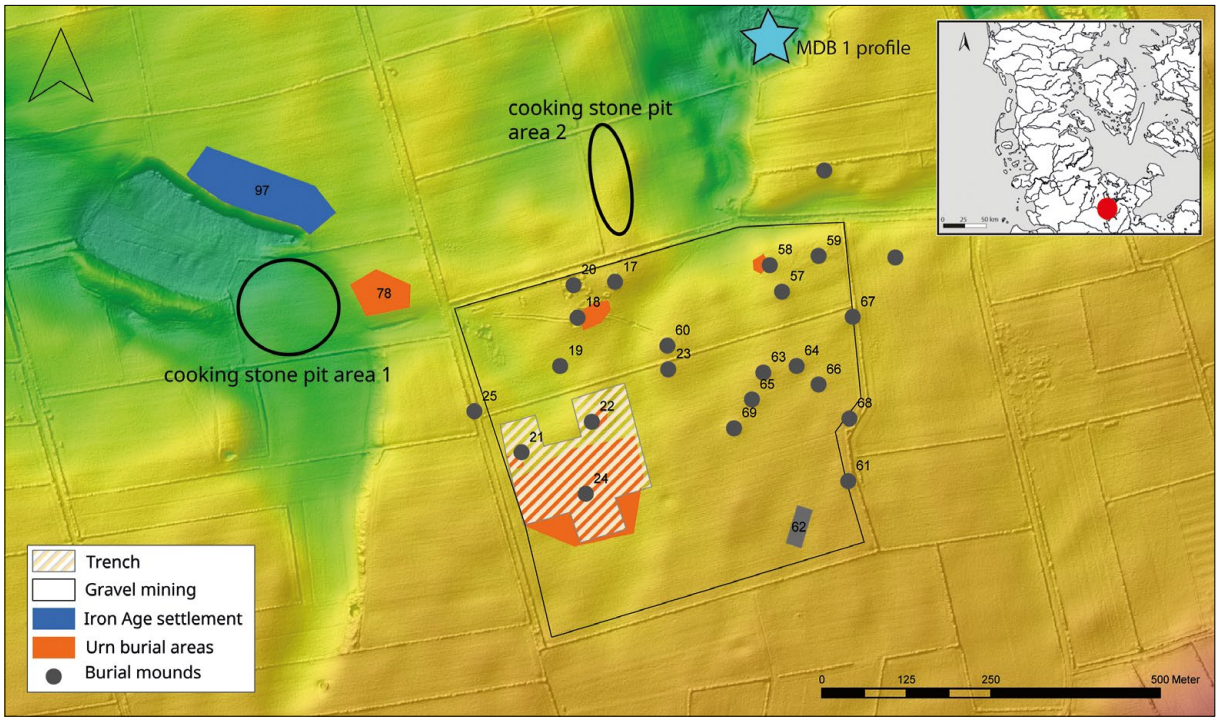


Fig. 1. The site of Mang de Bargen in Schleswig-Holstein (data after Lütjens 2014 and DGM2 © GeoBasis-DE/LvermGeoSH; graphics S. Schaefer-Di Maida).

treetrunk coffins on stone constructions of varying complexity. Mound LA 57 has the same type of construction but revealed cremated remains. Secondary burials in the mounds were carried out from the Late Neolithic to the Younger Bronze Age. The Late Neolithic and Older Bronze Age secondary burials continued to maintain the customary grave construction method and were also covered by a new/extended mound after they were interred in the existing mound. Meanwhile, the Younger Bronze Age burials were cremations on stone pavements and urn burials. They were often located in the east of the mound, but sometimes in the west, and the majority (75 %) were concentrated outside the mound. Just one was buried in the mound mantle and a few (n = 6) were placed either at the far edge within, or immediately in front of, the mound rim. The urns were mostly protected by stones, which consisted of rolled stones, kerbstones, and split pieces. Less frequently, stone slabs were used for protection. Above the urn, the stone packing was often sealed off with some sort of cover packing. Sometimes the urns had a cover – a slab, a vessel piece, or an upright or inverted bowl. Rarely, a capstone was used. The vessels usually stood on a base made of several stones, less often on a single stone, a stone slab (e.g. of granite) or, even more rarely, on several stone slabs. The cremation burials on stone pavements were mostly interred in the mound rim area, sometimes outside the mound, and rarely in the mound mantle. Overall, however, it is noticeable that they are relatively close to the mound, so a clear relationship can be established, while some urn burials, on the other hand, may be further away. The graves have an average length of about 1.5 m and an average width of about 0.6 m. Mostly the stone packing, sometimes multi-layered, has a rounded-rectangular shape. More rarely it is rather irregular. Overall, the Younger Bronze Age burials were seldom interred in the mound mantle, but were mostly buried flat in the ground in the immediate vicinity of the burial mounds, concentrated mainly around mounds LA 18 and LA 58 (Fig. 2). With the Pre-Roman Iron Age, the burial activities were concentrated in one area, which still included three Bronze Age barrows (see below).

https://doi.org/10.2369/9783869354439.beyond-urnfields

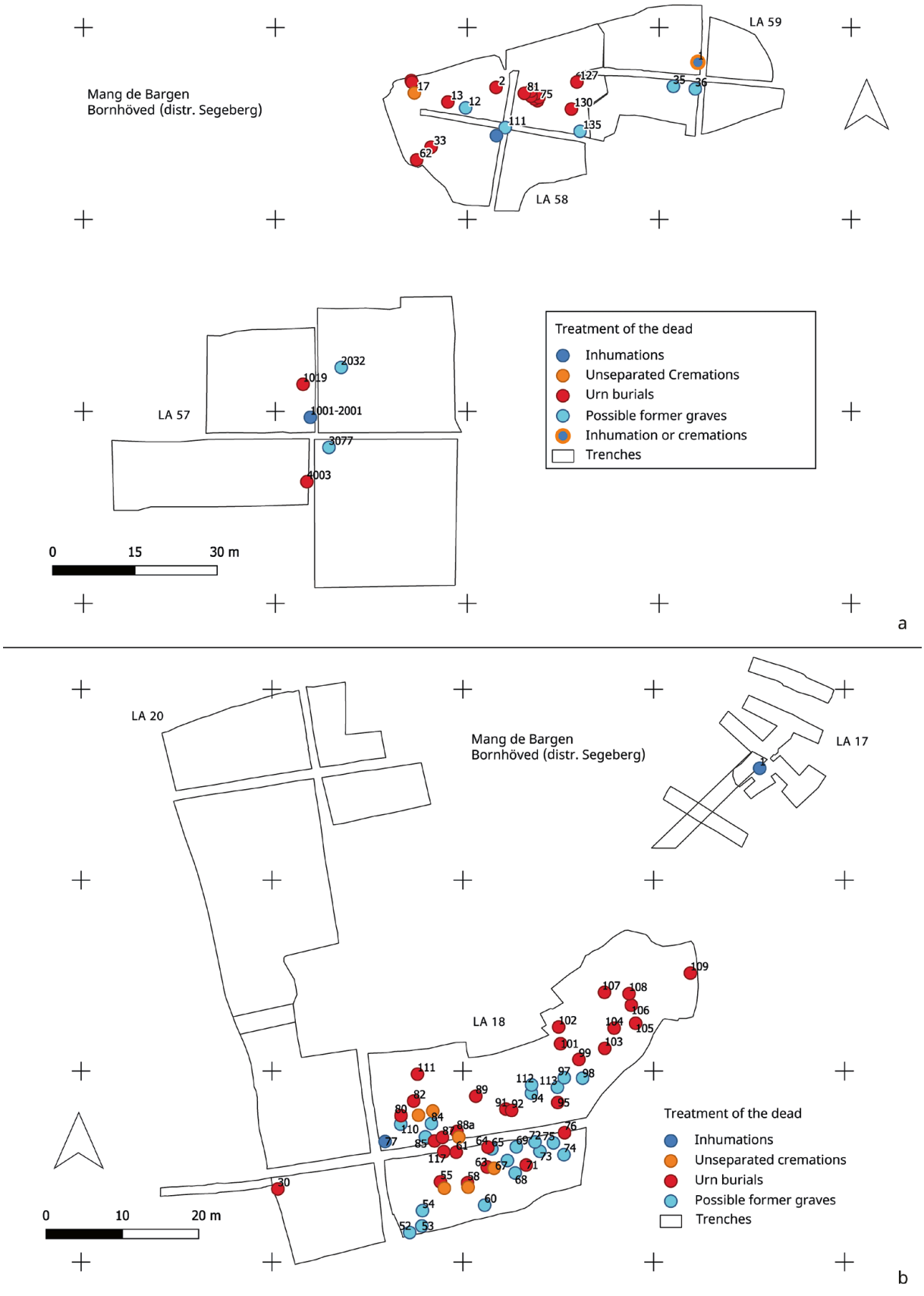


Fig. 2. Distribution of graves around the burial mounds (a: LA 58; b: LA 18) at Mang de Bargen (graphics S. Schaefer-Di Maida).

https://doi.org/10.2369/9783869354439.beyond-urnfields

Chronology: From inhumation to cremation

Approximately 76 % of the Bronze Age graves were radiocarbon-dated (54 of 68 graves; Fig. 3). The dates were measured at the Leibniz Laboratory in Kiel and calibrated using the OxCal calibration program (Reimer et al. 2020; Bronk Ramsey 2009). The sequence of the dated burials shows that the burial change first appeared in the treatment of the dead and only later in the grave construction (Fig. 4). According to the absolute dates, the primary grave of mound LA 57 represents the first cremation burial at the site. Due to poor preservation, the last inhumation at the site could not be absolutely dated, meaning we can only estimate the moment of transition concerning the first cremation, which dates to between 1438 and 1293 cal BCE (2σ), i.e. from the middle of Period II to the beginning of Period III. This was shortly after followed by a secondary burial of an urn in the mound area of LA 18 between 1433 and 1291 cal BCE (2σ). Again shortly afterwards, two cremation burials that collectively date from 1386 to 1127 cal BCE were placed on stone pavements in the LA 18 area. After a further interval in time, 42 radiocarbon-dated urn burials followed, but only four cremation burials on stone pavements could be dated. They all cover a period between 1214 and 517 cal BCE. One urn was still buried in the younger Bronze Age section of the urnfield, even though the Pre-Roman Iron Age section of the urnfield was possibly already in use, with at least three urn burials dating to between 744 and 404 cal BCE in the burial mound area of LA 18. Since these graves date to the 'Hallstatt plateau', the time spans are unfortunately very long. Based on the few dates from the Iron Age section of the cemetery, it can be assumed that the area was used for burial between 770 and 60 cal BCE. Some finds from the graves even point to a later dating at around the beginning of our common era. Considering this sequence, the temporal transition from cremations in treetrunk coffins to those in urns seems to have occurred almost simultaneously, but it shows only one side of this transition process, as we can observe mainly the introduction of cremation and less the end of inhumation due to the lack of datable bone material. However, in order to examine this moment more closely, further cremation burials from Schleswig-Holstein that were still buried in burial mounds but also already in urns were absolutely dated within the framework of the project. In the course of this, the oldest cremation burial so far, which was still buried in a treetrunk coffin under a burial mound, was discovered. This grave is in Albersdorf and dates to between 1533 and 1427 cal BCE (2σ; burnt bone material), i.e. from the end of Period I to the middle of Period II.

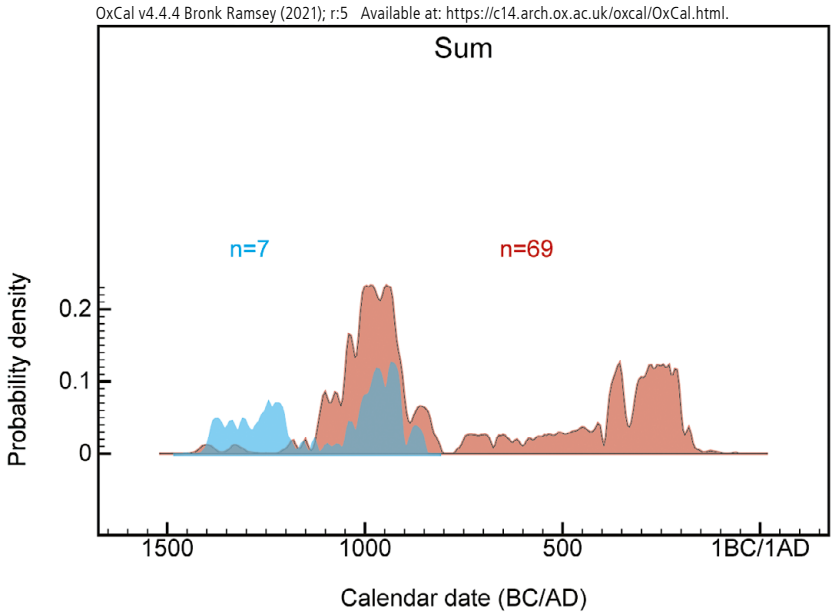


Fig. 3. Sum calibration of the absolutely dated urn burials (red distribution) and cremations on stone pavements (blue distribution) at Mang de Bargen (graphics S. Schaefer-Di Maida).

https://doi.org/10.2369/9783869354439.beyond-urnfields

The early date from Albersdorf shows that it is probably one of the first cremation burials in the study area. An establishment of the new treatment of the dead alongside the old grave construction practice should be assumed on the basis of the coinciding data from the end of Period II as taking place around 1300 BCE; cremation had, compared to inhumation, become the dominant practice in Period III. The establishment of cremation also marks the beginning of the use of the new type of grave construction, namely urn graves, which must have become an integral part of the burial system by 1200 BCE at the latest. Urn burial and the scattering of cremated remains on stone pavements were practiced at Mang de Bargen at the same time (Fig. 4); therefore, cremation burials on stone pavements here are not a transitional form and thus contrast with some other Schleswig-Holstein sites (e. g. Bornhöved LA 4; Grevenkrug LA 2; Wahlstedt LA 31, Leezen LA 64; Nützen LA 13), which, according to absolute data (Schaefer-Di Maida 2023), show a different behaviour: The majority of these other sites show a temporal gap between the use of cremation burials on stone pavements and the use of urns (Aner/Kersten 1991), but it must be pointed out that these sites were only dated according to relative chronology.

These changes took place at the beginning of the urnfield phenomenon influence, which is also evident at the Mang de Bargen site in the change in material culture, especially from 1200 BCE onwards. While in Period II (Hornstrup et al. 2012) mainly weapons and tools dominate the grave goods, from the middle of Period III onwards only costume components, such as dress pins, buttons or rings, and personal objects, such as razors or awls, are found. Weapons are then no longer present. This type of equipment continues in Periods IV and V. With Period VI, new forms developed, but the traditions of, for example, the addition of dress pins continued. With the Iron Age, again new forms developed as well as new categories of finds, such as belt parts. Besides the metal objects, the ceramic spectrum also shows fundamental changes. While there are no, or hardly any, pottery vessels from the Late Neolithic and Period I, small beakers are recorded for Period II. Then, from Period III

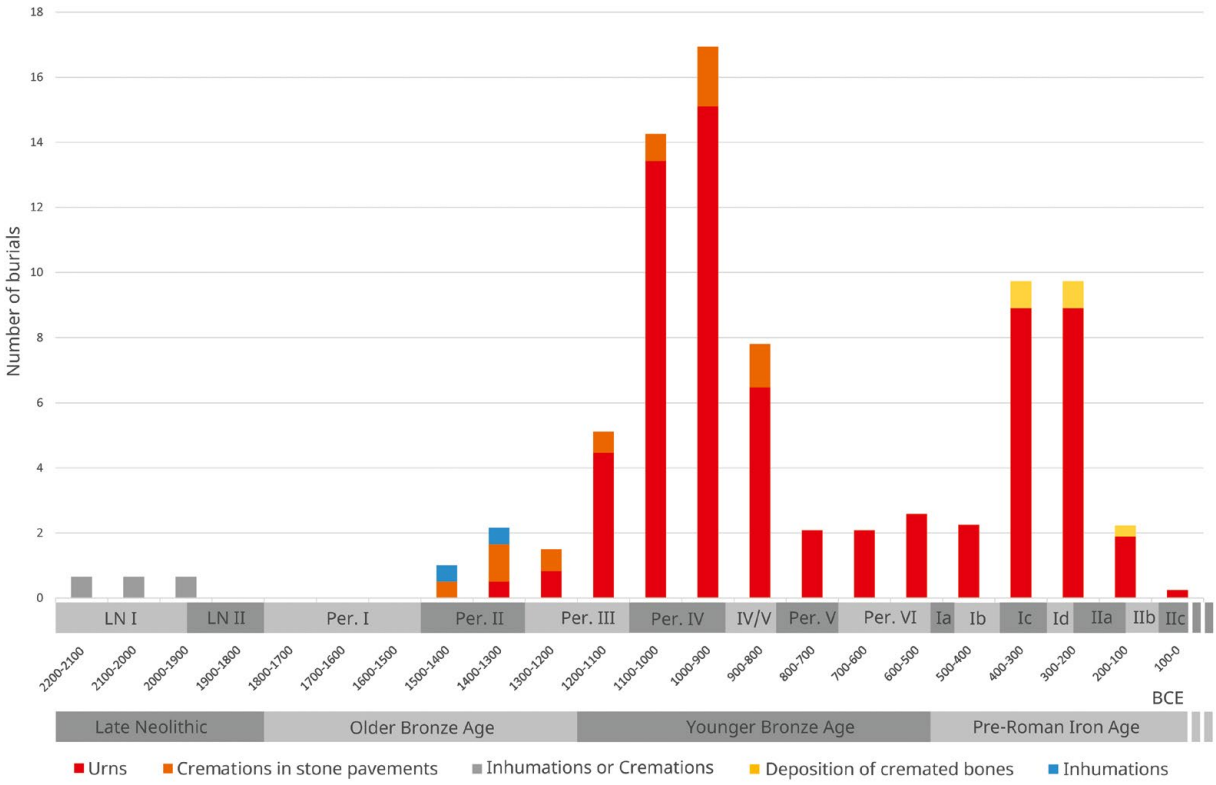


Fig. 4. Grave types at Mang de Bargen, dated according to relative as well as absolute chronology (graphics S. Schaefer-Di Maida).

https://doi.org/10.2369/9783869354439.beyond-urnfields

onwards, a rise in ceramic vessels can be observed, with a strong increase in the size and variety of forms. In addition to pots/barrels, tureens, double coni, and bowls (including a *Lappenschale mit Randzipfeln*), it was also possible to reconstruct a decorated cone-neck-shaped special form that can be integrated into a northern European contact network (Kneisel 2012, 152). Then, in Period VI, new forms and decorations developed (e.g. tripartite tureens with *Winkelbandmuster*). With the Iron Age, new forms appear again, but the vessels at Mang de Bargen, due to poor preservation, often do not allow a reconstruction.

Initial investigations of the burial sequence at two of the barrows, which show a long period of occupancy with many later urn burials, permit a hypothesis on the use of the cemetery to be formulated by using Bayesian model calculations. It was examined whether shorter intervals (e.g. 2 ± 5 years) in the burial sequence are more possible than those taken as an average based on the total time period over which the mounds were used (Kneisel et al. 2022). A duration of 75 years (LA 18) and 45 years (LA 58) roughly corresponds to the life span of a house (Müller 2011, 176). It can thus be hypothesised that the graves in barrows LA 18 and LA 58 may have belonged to a small burial community.

Anthropology

The anthropological determination of the cremated remains from the Mang de Bargen site allows conclusions to be drawn about possible social relationships that may be reflected at the cemetery. For the analysis, burnt bones were selected from features that were still preserved and relevant with regard to the grave goods and the find context. Only bones that were anthropologically examined were also absolutely dated. Some of the cremated remains were anthropologically determined by Helene Agerskov Rose and Katharina Fuchs in the course of preliminary investigations (n = 67), other remains (n = 29) were subjected to a full anthropological investigation by Susanne Storch. The cremated remains allowed a classification into age groups (infans 1: 0–6 years, infans 2: 7–12 years, juvenilis (early/late): 13–18–20 years, adultus: 20–40 years, maturus: 40–60 years, senilis: >60 years; after Acsádi/Nemeskéri 1970, 104), but not a sex determination. At first glance, the group of juveniles (n = 14) and children (n = 23–24) predominated in the age spectrum. Adults and senile persons (n = 6–7), on the other hand, formed the minority. Nine cremations allowed only very imprecise classifications of the remains, ranging from infancy to senile age. The spatial distribution of cremations around the burial mounds shows a separation of child and juvenile burials. It is noticeable that children tended to be buried near a mound, while juvenile individuals and adults up to seniles were buried further away from it. Burial groups of children and juveniles are also known from mound LA 58, but here juveniles (perhaps up to a certain age group) were still buried together with children. Accordingly, it is reasonable to assume a complex order that may have provided access to a burial complex. It should be noted that the division into the categories 'children' and 'juveniles' according to certain age groups is based on modern standards that as such do not necessarily have to apply to Bronze Age societies. A division into 'children' and 'juveniles' could also have been dependent on elements other than age, which determined the location on the burial site. In this context, 'social age' must also be taken into account, which may have been culturally determined and associated in a society with certain ideas, characteristics, tasks, and evaluations (Hofmann 2008, 159). For children and juveniles, the choice of burial vessel showed many variations (including a special form), while adults and seniles usually received the same vessel form (the majority were cylindrical vessels [*eingliedrige Tonnen*]). For infants also, only these *eingliedrige Tonnen* were used as urns, so they received the same uniform vessels as adults. With regard to the grave goods, comparable conclusions can be drawn. While the range of grave goods from adults to seniles is rather concentrated on tools, dress pins and ring jewellery, the graves of children and juveniles very often contain grave goods such as vessels and buttons, but also tools, dress pins and ring jewellery. Occasionally, a fossil and food remains were also found among the grave furnishings of juveniles. The grave goods show less diversity than the grave vessels;

https://doi.org/10.2369/9783869354439.beyond-urnfields

nevertheless, the grave goods show a tendency towards the equal treatment of older children/juveniles and adults, while very young infants did not receive any grave goods. Furthermore, it is noticeable that juveniles were more diversely equipped than children, so it can be assumed that the grave goods were person-related and emphasised personality as well as social status, and possibly gender. Based on the correlations between age, grave goods, grave vessels, and location, it can be assumed that the burials at the site were structured in a deliberate way, which may reflect a social, perhaps familial, division of society. Assuming that the present age distribution is representative, the thesis can be formulated that in Periods III and IV secondary burials in and around mounds were preferentially reserved for children and juveniles, while adults were located further away from the mound or in flat cemeteries – assuming that no other adult burials were located in higher strata and had already been removed by agricultural activity. Possibly the burials of children and juveniles in barrows were considered to be in need of particular protection – on the one hand in the sense of maintenance of a burial monument whose future whereabouts were possibly considered more secure, on the other hand in the form of the symbolic protection by possible ancestors who were the first to be buried in the barrow.

Iron Age

The graves

An urn burial ground with 201 Pre-Roman Iron Age graves is located at the southern edge of the barrow field between three mounds (LA 21, 22, 24) which can probably be assigned to the Older Bronze Age (Fig. 5). Due to the partly very poor state of preservation of the graves (caused by uncontrolled removal of the topsoil), reconstruction of the vessels is very difficult and some graves are so heavily disturbed that statements about them are no longer possible. Some grave goods or parts of burnt bones were even found loose in the ground. Regarding the construction, urns and cremation deposits can be distinguished. The urns were differently preserved depending on their location. The grave construction was mostly limited to protective stones, which could consist of stone slabs as well as boulders. Due to the predominantly moderate preservation, just the stone base and the construction slabs were preserved (125 urn graves), so that a more or less compact and closed stone protection around each urn can only be assumed. A covering by a stone (nine graves) occurred only sporadically. Even more rarely, the urns were covered with another vessel (four graves). A covering by stone pavement of the protective stones was also partly reconstructable. Sometimes no construction could be detected, but it must not be assumed that the urn was buried free-standing, but rather that the construction was largely destroyed (10 urn graves). Only in two cases were urns placed in stone cists (features 90 and 346). In terms of finds, belt parts with belt hooks, belt plates, rings with and without ferrules, and strap ends dominate. Furthermore, dress pins were often added to the grave goods. Among them are Holstein pins, a 3-disc-head pin, nail-head pins or swan-necked ones. Only occasionally were fibulae (among others a ball brooch), an eye ring, awls, an amber bead or a knife fragment found in the burials.

The construction for cremation deposits consisted of a stone setup, with no indication of a burial vessel. This mostly included a stone shelter, which was made of boulders and sometimes of stone slabs. In three cases, only a stone accumulation was found. In cases where no stone protection and no stone accumulation could be proved, there was only a base stone underneath the cremation deposit, which could indicate a former construction.

Chronology

^{14}C-dating was performed for some of the Iron Age burials (*c.* 14 %; 28 graves; Fig. 6). The earliest three dates have calibrated ^{14}C-ages of around 2450 BP, coinciding with the Hallstatt plateau. This

https://doi.org/10.2369/9783869354439.beyond-urnfields

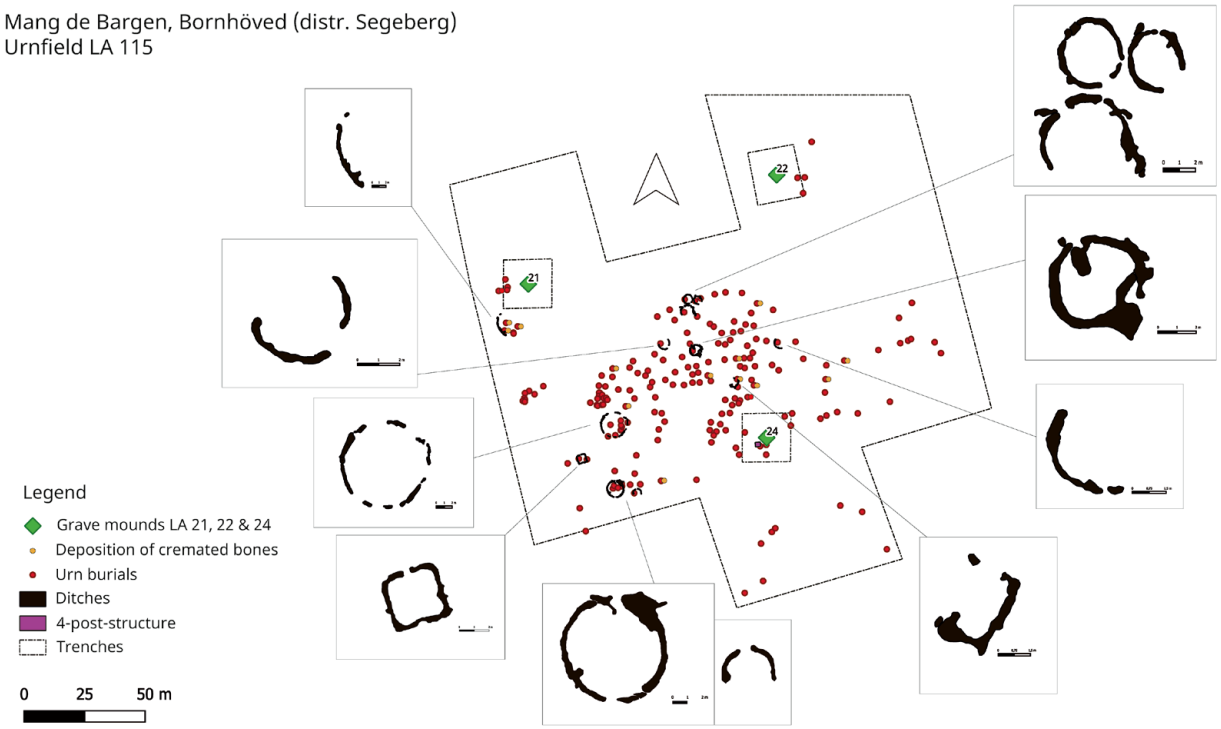


Fig. 5. The urnfield LA 115 at Mang de Bargen (graphics S. Schaefer-Di Maida).

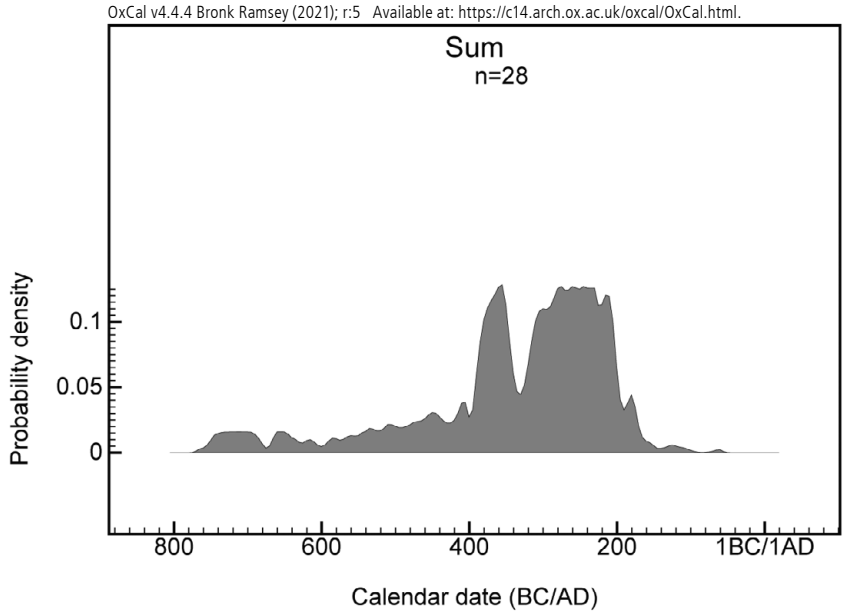


Fig. 6. Sum calibration of absolutely dated graves from the Pre-Roman Iron Age cemetery LA 115 at Mang de Bargen (graphics S. Schaefer-Di Maida).

does not allow a more precise dating than to between 800 and 400 cal BCE. The following three dates are again more precise and suggest a beginning of burials in the LA 115 cemetery between 726 and 395 cal BCE, i.e. between the mid/end of Period V and phase Ib (according to Hingst 1959; see Kneisel 2021). A 68 % probability shows the beginning of Iron Age burials only around 500 cal BCE as well as their end around 400 cal BCE, which would mean phases Ia to Ib for initial buri-

https://doi.org/10.2369/9783869354439.beyond-urnfields

als (as far as they have been dated). The unmodelled, calibrated dates show a uniform distribution of burials between 405 and 60 cal BCE, i.e. between the mid/end of phase Ib and the end of phase IIc, or with a 68 % probability only up to 100 cal BCE, which would be at the end of phase IIb. Based on these dates from the burial ground, two phases of burials can be assumed – an earlier and shorter one, *c.* 700–400 cal BCE, and a younger and longer one, *c.* 400–100/60 cal BCE. The grave goods confirm a use of the urn cemetery between the end of the Younger Bronze Age and Iron Age stage IIb. Considering the finds, a main Iron Age phase of use can be assumed in stage IIa, i.e. *c.* 250–150 BCE, which is consistent with the large number of absolute dates pointing to this period. Accordingly, the urnfield was used for burials from the end of the Late Bronze Age until phase IIb (according to Hingst 1959), i.e. based on the finds and the absolute dating, from 770 to 60 cal BCE.

Burial ditches

Some burials were enclosed by a circular ditch, which usually surrounded just a single central grave. Larger ditches enclosed up to eight graves, the arrangement of which in the ditch varied. Ditches were always open to the north, so Lütjens assumes a deliberate positioning (Lütjens 2014, 32). Twelve such ditches were found, two of which were only rudimentarily reconstructable. Only one was square, another one was rounded-rectangular to ring-shaped. They all showed different profile shapes – from trough-shaped to rectangular, pointed to irregular, and they were filled with humic sand. The diameters of the entire ditch circles vary greatly from between 1.8 to 10 m. The widths of the ditches range from 0.2 to 0.7 m and the depths from 0.1 to 1.5 m. A spatial arrangement of the ditches at the cemetery cannot be determined. The reason for this can partly be assumed to be a deficit in preservation due to unattended soil removal by gravel quarrying. The absolute dating shows that the graves placed centrally in the ditch do not date from any particular time horizon. It can be assumed that mainly social aspects played a role in the placement. Circular ditches at Younger Bronze Age and Iron Age cemeteries in Schleswig-Holstein are rare but not uncommon. They also occur, for example, in the district of Pinneberg (Younger Bronze Age; Schmidt 2018, 24–33), Westfalen (Brink-Kloke et al. 2006; Wilhelmi/Herrmann 1981), in northeastern Lower Saxony (Late Bronze Age; Fries/Näth 2008, 167–168), Denmark (see below), and also in the Netherlands and Belgium (Van Beek/Louwen 2012, 48, 50–51; Verlinde 1987, 198–199). In southern Germany they are also known as 'grave gardens' (*Grabgärten*; Becker 1995, 75–76). They can occur in different forms. While at Mang de Bargen we have predominantly circular ditches and an occasional square ditch structure, keyhole-shaped and rectangular forms are also known from Overijssel (Netherlands), for example (Verlinde 1987). In general, multiple burials within such a barrier-like construction are to be assumed to symbolically demarcate or enclose social connections (e.g. familial; hierarchical; social). At the site of Groß Timmendorf, for example, several urns are grouped together underneath stone pavements. The burials were demonstrably mostly not simultaneous (Fischer 2000, 38) – as is also the case at Mang de Bargen. Another parallel to the ditches at Mang de Bargen is offered by the Pre-Roman Iron Age (500–200 BCE) site of Aarupgaard in southwest Jutland. There, each urn burial was surrounded with a ditch (Rose 2020).

Discussion

Compiling the presented results, it can be said that, for the change in burial customs in Bronze and Iron Age Schleswig-Holstein, we have a first step: the change in the treatment of the dead from inhumation to cremation, and then a second step: the change in the type of grave construction (burial mound and treetrunk coffin) to the urn grave (with stone construction). Therefore, the implementation of cremation burials and the establishment of the urn graves are discussed below as two different

https://doi.org/10.2369/9783869354439.beyond-urnfields

transformations. We assume that the so-called urnfield phenomenon, which included the establishment of urns as proper burial vessels, appeared in the research area around 1100 BCE. At the Mang de Bargen site, the development of urn burials could be traced as follows: 1) secondary burials in the burial mound, 2) burial areas adjacent to burial mounds, 3) urnfields independent of burial mounds. The latter can be situated within sight of barrows and thus still refer to them. Early cremation burials in Schleswig-Holstein which also occurred near water (cf. Albersdorf: Aner/Kersten 1991, 5–6; Schaefer-Di Maida 2023) could indicate that the custom of cremation did not necessarily have to have spread from south to north, but could have taken other routes, and thus an influence from the north or northwest would also be possible. Likewise, early urn burials, such as those in Mang de Bargen or further north in Schleswig-Holstein, or even on the North Frisian Islands, suggest that the urn burial custom also had a diffuse spread. A reconstruction of the transmission routes is accordingly difficult. It can only be assumed that cremation burial was either an independent development from the north, or that it was brought in by local or perhaps non-local travellers and thus allowed different but synchronous transmission. Because of the use of sea routes, diffuse processes of transmission are possible.

The simultaneous emergence of new symbols indicating new cosmological knowledge may suggest changes in worldview as a trigger. A new ideology may have interacted with other spheres of life and thus affected the construction of graves and houses. The cremation of the dead thereby signifies an irreversible physical (and perhaps spiritual) transformation of the body. It is thereby transferred into a state that is easier to handle in terms of both weight and substance (avoiding the process of decomposition). Burial rituals can thus last longer or be 'postponed' (Oestigaard 2013, 500). Fire may also have played a certain role. For Bronze Age burial rites, it is very likely that they did not represent an isolated area of life but were entangled with many elements that characterise a society (cf. Hofmann 2008, 99).

The change in the treatment of the dead is accompanied by a change in the material culture. Hoard finds decrease considerably with Period III, so it can be assumed that a decline of ritual or economic significance took place in hoarding routines. The range of deposits was limited to costume items and tools. In barrows, the amount of bronze objects remained stable, while in flat graves their numbers actually increased slightly, resulting in a balance of similar finds in flat graves and barrows. The increase in the abundance of grave goods in the previously poorly equipped flat graves might show the start of the change towards more egalitarian social structures (Kneisel 2021). This is supported by the new funerary compositions: In burial mounds, costume items, toiletry utensils, and pottery were included as before, while weapons, though less common, were still represented in high variance as grave goods in Period II. A few tools such as awls completed the assemblage. The amount of ceramic grave goods increases strongly with Period III. The number of grave goods per grave remains stable at between one and up to nine items. In flat graves, grave goods increase considerably with Period III and show compositions of pottery, costume and toiletry utensils. With up to six grave goods per grave, the flat grave inventories are no longer as distinguishable from those of the barrow graves as before. Overall, the range of grave goods from Period III can be characterised as very varied, since gold, glass, and especially pottery finds increased. Amber finds, however, decreased. The decline of weapons and the concentration on more personal objects, such as parts of costume and toiletry utensils, may have resulted from a presumed lower availability of bronze in general, which is especially reflected in the decrease of depositions as mentioned above, which need not mean an economic change but changes in certain routines, driven by social, cultural and symbolic transformations (Brück/Fontijn 2013). The change in burial practice indicates a central social change, in that it was no longer only certain persons who received a grave with a lot of grave goods, but now the great masses were buried with everyday objects but not a remarkable number of them. The change in grave goods could have been a matter of emphasising the personal relationship between the included objects and the

https://doi.org/10.2369/9783869354439.beyond-urnfields

personality of the deceased, which was possibly diminished through cremation, where the body is reduced to the point of being unrecognisable (Williams 2013, 198–199).

With the establishment of the new burial custom, which at first still followed the old patterns of grave construction, there was at the same time a slight decrease in mound construction and a slight increase in flat graves, which from then on contained almost exclusively cremations. Cooperative patterns (e.g. mound building, house building) or the committed engagement of individuals within a community to be cooperative on behalf of a larger group and the associated social roles are likely to have lost importance. The cultivation of identity formation within large groups thus declined, which is also reflected in the reduction of house sizes and thus households. In this context, the new social concept must have been more conducive to a better (survival) life of a population that focused on smaller social units. The basis of this decision must have been complex, since, following the decline in depositions, it does not seem to have been primarily economic, but rather social and ideological (Brück/Fontijn 2013). A model corresponding to this perspective has already been drawn by Roymans/Kortlang (1999), but applied to a different dataset for the southern Netherlands.

During this phase, an increase in activity is noticeable in the pollen profile of Lake Belau until 1300 BCE, as evidenced, for example, by the increase in hazel and cereals, while tree pollen declined. Feeser infers the use of forest grazing and livestock during this phase, which shows stable values from 1300 BCE onward (Feeser et al. 2023). The occurrence of millet (*Panicum miliaceum*), which is characterised by short growing seasons, thus shows increased control of land use (Effenberger 2018, 96; Kneisel et al. 2012, 276). Furthermore, millet requires a certain preparation of the soil with a hook, so new knowledge about cultivation techniques and new types of cereals can be observed (Effenberger 2018, 98). The performance of work in general as well as ownership and access rights (e.g. to fields, grassland) may also have changed in the course of the above mentioned developments.

Accordingly, this transformation phase can be seen as a drastic process that caused the establishment of the new mortuary rite and the accompanying socio-economic changes. This restructuring can be seen not only in Schleswig-Holstein, but also throughout Europe. The new treatment of the dead thus represents the transformative beginning of a development that continued to progress with the change in grave construction. The first urns appear at the Mang de Bargen site between the late 15th century and the beginning of the 13th century BCE, but they do not become dominant until the first half of the 12th century BCE. They do not appear to have become well established until *c.* 1200/1150 BCE. For all of Schleswig-Holstein, urn burial construction can also be assumed to have been established from 1150 BCE (i.e. the transition from Period III to IV). Burial mound construction at Mang de Bargen declined sharply at this time and coffin use also reached a low point. Cremation burials on stone pavements, which initially became established at the site at the same time as the urn burials, were only short-lived; flat graves, which are now almost exclusively to be recorded in the form of flat urn graves, increased strongly. Cremations that were placed secondarily in burial mounds show only a very small increase. The establishment of urn burials in this phase can thus be observed as unique, since the number of urn burials also reached a maximum within a short period of time (*c.* 1200–1000 BCE), which numerically exceeds preceding developments by far. At the same time, for the whole of Schleswig-Holstein, regional differences in the distribution of urns are recognisable. According to our data collection (Aner/Kersten 1991; card index of the heritage department), this distribution began to spread from the south to the north, showing an indication of the influences of the 'urnfield phenomenon' coming from the south. However, when considering the use of barrows for secondary burials, the calculation values shift again, so this statement must be seen as depending on the individual case. In the grave goods, pottery finds reach their peak, whereby regional or research-driven differences are to be noted. With the transition to the Younger Bronze Age, the frequency and diversity of artefacts and secondary burials in barrows and flat graves equalise, demonstrating a lack of social differentiation for the first time. At the same time, depositions increase again and, from the Younger

https://doi.org/10.2369/9783869354439.beyond-urnfields

Bronze Age onwards, their furnishings are similar to that of the graves, but with different preferences (graves contain more toiletry utensils, depositions contain mainly jewellery). Endrigkeit (2010) assumes, especially for the Period V depositions, that these were now mainly 'women's deposits', which she associates with different ideological interpretations (Endrigkeit 2010, 87–90, 114–115). This has already been established for the Danish hoard developments as well (Kristiansen 2006, 177). The number of finds per deposit is also much higher than during the Older Bronze Age and thus contrasts with the grave finds, where there are fewer items per grave.

Settlement findings become more frequent with the Younger Bronze Age. However, these are more settlement pits and less house layouts. In house construction, moreover, a reduction of the house size to an average of 80 m² is detectable from about 1200 BCE onwards. With the transition to Period IV, one-, two-, and three-aisled houses are represented, showing a high diversity, which may also suggest an equally diverse household design and functionality. For Jutland, Kristiansen was also able to establish that, in addition to house reduction, less solid post structures are found in house construction (Kristiansen 1999, 287; Søgaard et al. 2019, 214). The small number of people needed in grave construction and the emergence of smaller house sizes indicates the development of smaller households or group structures. The pollen composition and soil formations in this phase show that tree pollen were declining, while soil erosion was increasing and a more intensive land use with cereal cultivation and grassland grazing can be assumed (Dreibrodt/Wiethold 2015, 311; Feeser et al. 2023, 8). An interaction between the declining tree pollen curve and a lower use of wood in burial and house construction can at the moment only be assumed for Schleswig-Holstein, but is proven for Danish sites (e. g. in Thy, Søgaard et al. 2019, 214–215). The demand for wood for the increasing number of cremations may also have been met by collecting firewood from smaller trees (Tiedtke 2023). With this phase, around 1200/1100 BCE, a social restructuring was emerging, which enabled the establishment of the above-mentioned, possibly (more) egalitarian structures. The new structures included changes in burial customs, the abandonment of monumentality and the strong differentiation of grave goods. Instead, equality in grave and house construction was achieved, which no longer required the cooperation of large groups, but could be accomplished by smaller ones. Kristiansen assumes that there was an increase in 'common farmers' and a decrease in 'chiefs' in Jutland in this period. The latter were said to have been present in smaller numbers, but were possibly more powerful individuals (Kristiansen 2018, 116). In the Schleswig-Holstein data, this cannot be recorded for this phase – especially against the background of the grave and house developments mentioned above. Possibly, this thesis is only applicable to the research area for the developed Younger Bronze Age. The second part of Period III can thus already be considered as part of the Younger Bronze Age, in which basic structures for future Younger Bronze Age developments were created. At the site of Mang de Bargen, some graves which were dated to the Younger Bronze Age based on the grave goods could already be dated to the middle or end of Period III by the use of absolute dating results. This picture of equality in death in the Younger Bronze Age is softened by age-related stratifications, in that graves of children and juveniles were given preferential treatment in terms of placement and furnishings. With the Pre-Roman Iron Age, this differentiation again seems to have become unimportant, as far as we can tell from the latest anthropological investigations. Instead, a new differentiation appears, with some urns being buried within ditches, which suggests new social demarcations.

Conclusion

In conclusion, the spread of the urnfield phenomenon in Schleswig-Holstein can be understood as a complex process that seems to have interacted with many other areas of life. However, the exact ways in which the new way of dealing with the dead were spread have not yet been conclusively clarified.

https://doi.org/10.2369/9783869354439.beyond-urnfields

Was there an independent development from the north-northwest or was the new custom spread by travellers? In addition, where did these travellers come from and what routes did they take? In order to answer these open questions, strontium isotope analyses are currently being carried out on early cremation burials, so that these questions can be approached and results can complement the research carried out in Denmark (Reiter et al. 2021).

Acknowledgements

The research was performed within the framework of the CRC 1266 'Scales of transformation – Human-Environmental Interaction in Prehistoric and Archaic Societies', funded by the Deutsche Forschungsgemeinschaft (DFG, German Research Foundation) – Project-ID 290391021 – SFB 1266. Furthermore, we would like to thank Susanne Storch, Helene Agerskov Rose and Katharina Fuchs for their extensive anthropological research, which has taken our analyses a big step further. Moreover, we thank the Archäologisches Landesamt Schleswig-Holstein (ALSH) for providing the sample material and helping to overcome any bureaucratic hurdles in the sampling process.

Bibliography

Acsádi/Nemeskéri 1970: G. Acsádi/J. Nemeskéri, History of Human Life Span and Mortality (Budapest 1970).

Aner/Kersten 1991: E. Aner/K. Kersten, Dithmarschen. Bearbeitet von K. Kersten unter Mitwirkung von K.-H. Willroth und H.-H. Steen. Die Funde der älteren Bronzezeit des nordischen Kreises in Dänemark, Schleswig-Holstein und Niedersachsen 17 (Neumünster 1991).

Becker 1995: S. Becker, Die Grabgärten der Latènezeit in Mittel- und Westeuropa. Archäologische Informationen 18(1–2), 1995, 75–78.

Van Beek/Louwen 2012: R. Van Beek/A. Louwen, Urnfields on the move: testing burial site-settlement relations in the eastern Netherlands (c. 1100–500 BC). Archäologisches Korrespondenzblatt 42(1), 2012, 41–60.

Brink-Kloke et al. 2006: H. Brink-Kloke/H. Heinrich/U. Bartelt, Das Schlüsselloch-Gräberfeld am Oespeler Bach: Befunde und Funde der jüngeren Bronzezeit am Hellweg in Oespel und Marten, Stadt Dortmund (Main am Rhein 2006).

Bronk Ramsey 2009: C. Bronk Ramsey, Bayesian Analysis of Radiocarbon Dates. Radiocarbon 51(1), 2009, 337–360. https://doi.org/10.1017/S0033822200033865.

Brück/Fontijn 2013: J. Brück/D. R. Fontijn, The Myth of the Chief: Prestige Goods, Power, and Personhood in the European Bronze Age (Oxford 2013).

Burkhardt 2014: S. Burkhardt, 2014-111 Bornhöved, Kreis Segeberg, Brandgräberfeld der vorrömischen Eisenzeit LA 115. Bericht über die archäologische Hauptuntersuchung 2014. Unpubl. report, Archäologisches Landesamt Scheleswig-Holstein (Schleswig 2014).

Dreibrodt/Wiethold 2015: S. Dreibrodt/J. Wiethold, Lake Belau and its catchment (northern Germany): A key archive of environmental history in northern central Europe since the onset of agriculture. The Holocene 25(2), 2015, 296–322.

Effenberger 2018: H. Effenberger, Pflanzennutzung und Ausbreitungswege von Innovationen im Pflanzenbau der Nordischen Bronzezeit und angrenzender Regionen. Studien zur nordeuropäischen Bronzezeit 4 (Kiel, Hamburg 2018).

Endrigkeit 2010: A. Endrigkeit, Bronzezeitliche Depotfunde in Schleswig-Holstein: eine kulturhistorische Studie. Universitätsforschungen zur Prähistorischen Archäologie 178 (Bonn 2010).

Falkenstein 1997: F. Falkenstein, Eine Katastrophen-Theorie zum Beginn der Urnenfelderkultur. In: C. Becker (ed.), Chronos. Beiträge zur prähistorischen Archäologie zwischen Nord- und Südosteuropa. Festschrift für Bernhard Hänsel. Internationale Archäologie, Studia honoraria 1 (Espelkamp 1997) 549–561.

Falkenstein 2017: F. Falkenstein, Zum Wandel der Bestattungssitten von der Hügelgräber- zur Urnenfelderkultur in Süddeutschland. In: D. Brandherm/B. Nessel (eds.), Phasenübergänge und Umbrüche im bronzezeitlichen Europa (Bonn 2017) 77–96.

Feeser et al. 2023: I. Feeser/C. van den Bogaard/W. Dörfler, Bericht zur Palynology. Palaeoecological investigations at the archaeological site Mang de Bargen, Bornhöved, Kreis Segeberg: new insights into local to overregional land-use changes during the Bronze Age. In: S. Schaefer-Di Maida, Unter Hügeln. Bronzezeitliche Transformationsprozesse in Schleswig-Holstein am Beispiel vom Fundplatz von Mang de Bargen, Bornhöved (Kr. Segeberg). Teil II (Leiden 2023) Anhang VII.3, 423–439.

Fischer 2000: L. Fischer, Das Gräberfeld der vorrömischen Eisenzeit von Groß Timmendorf, Kr. Ostholstein. Untersuchungen zu Chronologie, räumlicher Struktur und gesellschaftlichem Wandel. Unpubl. PhD dissertation, Kiel University (Kiel 2000).

Fokkens 1997: H. Fokkens, The genesis of urnfields: economic crisis or ideological change? Antiquity 71, 1997, 360–373.

https://doi.org/10.2369/9783869354439.beyond-urnfields

Fries/Näth 2008: J. E. Fries/F.-M. Näth, Gräber aller Art und auch noch Häuser. Berichte zur Denkmalpflege in Niedersachsen 28(4), 2008, 167–168.

Harding 2000: A. Harding, European Societies in the Bronze Age (Cambridge 2000). https://doi.org/10.1017/CBO9780511605901.004.

Hingst 1959: H. Hingst, Vorgeschichte des Kreises Stormarn. Veröffentlichungen des Landesamts für Vor- und Frühgeschichte Schleswig. Vor- und frühgeschichtliche Denkmäler und Funde in Schleswig-Holstein V (Neumünster 1959).

Hofmann 2008: K. Hofmann, Der rituelle Umgang mit dem Tod. Untersuchungen zu bronze- und früheisenzeitlichen Brandbestattungen im Elbe-Weser-Dreieck. Schriftenreihe des Landschaftsverbandes der ehemaligen Herzogtümer Bremen und Verden 32 = Archäologische Berichte des Landkreises Rotenburg (Wümme) 14 (Oldenburg 2008).

Hornstrup et al. 2012: K. M. Hornstrup/J. Olsen/J. Heinemeier/H. Thrane/P. Bennike, A New Absolute Danish Bronze Age Chronology as Based on Radiocarbon Dating of Cremated Bone Samples from Burials. Acta Archaeologica 83, 2012, 9–53.

Kneisel 2012: J. Kneisel, Anthropomorphe Gefäße in Nord- und Mitteleuropa während der Bronze- und Eisenzeit. Studien zu den Gesichtsurnen – Kontaktzonen, Chronologie und sozialer Kontext. Studien zur Archäologie in Ostmitteleuropa 7 (Bonn 2012).

Kneisel 2021: J. Kneisel, Chronology and Transformation. The Transition from Bronze to Iron Age in Northern Europe. In: E. Kaiser/W. Schier (eds.), Time and Materiality: Periodization and Regional Chronologies at the Transition from Bronze to Iron Age in Eurasia (1200-600 BCE). Prähistorische Archäologie in Südosteuropa (Rahden/Westf. 2021) 237–263.

Kneisel et al. 2012: J. Kneisel/W. Kirleis/M. Dal Corso/N. Taylor, Collapse or Continuity? Concluding Remarks on the Environment and Development of Bronze Age Human Landscapes. In: J. Kneisel/W. Kirleis/M. Dal Corso/N. Taylor/V. Tiedtke (eds.), Collapse or Continuity? Environment and Development of Bronze Age Human Landscapes. Proceedings of the International Workshop "Socio-Environmental Dynamics over the Last 12,000 Years: The Creation of Landscapes II (14–18th March 2011)" in Kiel (Bonn 2012) 267–279.

Kneisel et al. 2022: J. Kneisel/S. Schaefer-Di Maida/I. Feeser, Settlement patterns in the Bronze Age Western Baltic. Comparisons at different regional scales. In: F. Nikulka/D. Hofmann/R. Schumann (eds.), The Baltic in the Bronze Age. Regional Patterns, Interactions and Boundaries (Leiden 2022) 189–218.

Kristiansen 1998: K. Kristiansen, Europe before History. New Studies in Archaeology (Cambridge 1998).

Kristiansen 1999: K. Kristiansen, The Construction of a Bronze Age Landscape. Cosmology, Economy and Social Organisation in Thy, Northwestern Jutland. In: J.-H. Bech/M. Mikkelsen (eds.), Landscapes, settlement and subsistence in Bronze Age Thy, NW Denmark (Aarhus 1999) 281–292.

Kristiansen 2006: K. Kristansen, Cosmology, economy and long-term change in the Bronze Age of Northern Europe. In: K.-G. Sjögren (ed.), Ecology and economy in Stone Age and Bronze Age Scania (Lund 2006) 171–193.

Kristiansen 2018: K. Kristiansen, The rise and fall of the Bronze Age societies in Thy, northwest Jutland. In: J.-H. Bech/B. V. Eriksen/K. Kristiansen (eds.), Bronze Age Settlement and Land-Use in Thy, Northwest Denmark 1. Jutland Archaeological Society Publications 102 (Aarhus 2018) 107–132.

Lütjens 2008: I. Lütjens, Grabhügel und Kiesabbau. Die Ausgrabungen in Bornhöved und Groß Rönnau. Archäologische Nachrichten aus Schleswig-Holstein 14, 2008, 27–29.

Lütjens 2014: I. Lütjens, Altes und Neues aus Bornhöved. Ein Bestattungsplatz für über 1000 Jahre. Archäologische Nachrichten aus Schleswig-Holstein 20, 2014, 30–35.

Müller 2011: J. Müller, How Long was an Early Bronze Age House Used? In: I. Hildebrandt-Radke/J. Czebreszuk/W. Dörfler/J. Müller (eds.), Anthropogenic Pressure in the Neolithic and the Bronze Age in the Central European Lowlands. Field Workshop 28.–31. August in Śmigiel, Wielkopolska. Studien zur Archäologie in Ostmitteleuropa 8 (Poznań 2011) 173–178.

Oestigaard 2013: T. Oestigaard, Cremations in Culture and Cosmology. In: L. N. Stutz/S. Tarlow (eds.), The Oxford Handbook of the Archaeology of Death and Burial (Oxford 2013) 495–509.

Reimer et al. 2020: P. Reimer/W. Austin/E. Bard/A. Bayliss/P. Blackwell/C. Bronk Ramsey, The IntCal20 Northern Hemisphere Radiocarbon Age Calibration Curve (0–55 cal kBP). Radiocarbon 62(4), 2020. https://doi.org/10.1017/RDC.2020.41.

Reiter et al. 2021: S. S. Reiter/N. A. Møller/B. H. Nielsen/J.-H. Bech/A.-L. H. Olsen/M. L. S. Jørkov, Into the fire: Investigating the introduction of cremation to Nordic Bronze Age Denmark: A comparative study between different regions applying strontium isotope analyses and archaeological methods. PLoS ONE 16(5), 2021. https://doi.org/10.1371/journal.pone.0249476.

Rose 2020: H. A. Rose, Bayesian chronological modelling of the Early Iron Age in Southern Jutland, Denmark. PhD dissertation, Kiel University (Kiel 2020). https://macau.uni-kiel.de/receive/macau_mods_00001258.

Roymans/Kortlang 1999: N. Roymans/F. Kortlang, Urnfield symbolism, ancestors and the land in the Lower Rhine region. In: F. Theuws/N. Roymans (eds.), Land and Ancestors: Cultural Dynamics in the Urnfield Period and the Middle Ages in the Southern Netherlands (Amsterdam 1999) 33–62.

Schaefer-Di Maida 2018: S. Schaefer-Di Maida, Bronzezeitliche Transformationen zwischen den Hügeln (Mang de Bargen, Bornhöved, Kr. Segeberg). Archäologie in Schleswig 17, 2018, 27–44.

Schaefer-Di Maida 2023: S. Schaefer-Di Maida, Unter Hügeln. Bronzezeitliche Transformationsprozesse in Schleswig-Holstein am Beispiel vom Fundplatz von Mang de Bargen, Bornhöved (Kr. Segeberg). Teil I und II (Leiden 2023).

Schmidt 2018: J.-P. Schmidt, 300 Jahre Forschung, Das jüngerbronzezeitliche Gräberfeld von Kölln-Reisiek, Kr.

https://doi.org/10.2369/9783869354439.beyond-urnfields

Pinneberg, Archäologische Nachrichten aus Schleswig-Holstein 24, 2018, 24–33.

Schwerin von Krosig 1976: H. Gräfin Schwerin von Krosig, Untersuchungen zum vor- und frühgeschichtlichen Siedlungsablauf am Fundbild der Gemarkungen Bornhöved – Gönnebek – Groß-Kummerfeld – Schmalensee, Kreis Segeberg/Holstein. Offa-Ergänzungsreihe 1 (Schleswig 1976).

Storch 2023: S. Storch, Anthropologisches Gutachten zu den Leichenbränden/Skelettresten für das SFB 1266 Projekt D3. In: S. Schaefer-Di Maida, Unter Hügeln. Bronzezeitliche Transformationsprozesse in Schleswig-Holstein am Beispiel vom Fundplatz von Mang de Bargen, Bornhöved (Kr. Segeberg). Band II (Leiden 2023) Anhang VII.1, 371–406.

Søgaard et al. 2019: K. Søgaard/C. Christensen/M. Fischer Mortensen, Pollen analyses from lake, field and beach ridge deposits in the vicinity of the Bronze Age settlement at Bjerre Enge, Thy. In: J.-H. Bech/B. V. Eriksen/K. Kristiansen (eds.), Bronze Age Settlement and Land-Use in Thy, Northwest Denmark 1. Jutland Archaeological Society Publications 102 (Århus 2019) 193–222.

Tiedtke 2023: V. Tiedtke, Grab und Raum. Ressourcenteilung in der Rituallandschaft um den Bestattungsplatz Müllrose Fundplatz 2 (Brandenburg). Materialien zur Archäologie in Brandenburg 14 (Rahden/Westf. 2023).

Verlinde 1987: A. D. Verlinde, Die Gräber und Grabfunde der späten Bronzezeit und frühen Eisenzeit in Overijssel (Leiden 1987).

Wilhelmi/Herrmann 1981: K. Wilhelmi/B. Herrmann, Zwei bronzezeitliche Kreisgrabenfriedhöfe bei Telgte, Kreis Warendorf (Münster 1981).

Williams 2013: H. Williams, Death, Memory, and Material Culture – Catalytic Commemoration and the Cremated Dead. In: L. N. Stutz/S. Tarlow (eds.), The Oxford Handbook of the Archaeology of Death and Burial (Oxford 2013) 195–208.

Znoj 2012: H. Znoj, Trauer und Trauerbewältigung. Psychologische Konzepte im Wandel (Stuttgart 2012).

Stefanie Schaefer-Di Maida
Institute of Prehistoric and Protohistoric Archaeology
Kiel University
Kiel
Germany
sschaefer@ufg.uni-kiel.de

Jutta Kneisel
Institute of Prehistoric and Protohistoric Archaeology
Kiel University
Kiel
Germany
jutta.kneisel@ufg.uni-kiel.de

https://doi.org/10.2369/9783869354439.beyond-urnfields

Pre-Roman Iron Age burials in the lower Elbe region

Jochen Brandt

Keywords: Cremation cemeteries, Pre-Roman Iron Age, burial rites

Abstract: Harburg county and its adjacent areas in the counties of Stade and Lüneburg and the Hamburg-Harburg district lie south of the River Elbe; the region is a hotspot of Pre-Roman Iron Age research. This is largely due to Willi Wegewitz, the former director of the regional Helms-Museum, who between 1925 and 1966 carried out a large number of rescue and research excavations of Iron Age urn cemeteries. The sites were all published before 1977, making Harsefeld, Ehestorf-Vahrendorf, Putensen, Dohren, Marmstorf, Wetzen, and Tostedt-Wüstenhöfen well-known archaeological sites in the area. This paper will discuss several aspects of the regional burial sites, e.g. size, structure, burial rites and grave goods. A short list of the more important sites in the region is provided.

Introduction

The county of Harburg (German: *Lkr. [Landkreis] Harburg*), part of the federal state of Lower Saxony, Germany, lies south of Hamburg and the River Elbe. Along its northern border, a strip of marshland runs along the Elbe, but it is different to the sea marshes of the North Sea and seems never to have been of deeper interest for enduring settlement until the Middle Ages. Behind the marshland, the predominant landscape type of the area can be found: a morainic geest, made up of sands and morainic material of the second-last ice age, the Saale Ice Age. The landscape is characterised by flat hills with smooth slopes, and the soil is of a poor podsol or secondary podsol type. More fertile sand loess can be found on the eastern slopes of a ridge that runs from north to south down through the middle of Harburg county. This part is a geest landscape characterised by morainic highlands (German: *Hohe Geest*) with elevations reaching to just below 150 m. In historic times, it was largely dominated by heathland. The geest is drained by three small rivers and its tributaries – from west to east, these are the Este, the Seeve (with the Schmale Aue flowing into it) and the Luhe. There are no larger lakes. The western part of the county is flatter and forms part of the Zevener geest to the west. A small strip of land along the southwestern border of the county is wetland, connecting to the moors in the northwestern part of Lower Saxony. There have been no prehistoric settlements found in this area.

History of Pre-Roman Iron Age research in the region

A large number of burial sites dating to the Pre-Roman Iron Age (PRIA) are believed to have been destroyed in the 19th and early 20th centuries. The limited available information describes how the

https://doi.org/10.2369/9783869354439.beyond-urnfields

cemeteries were discovered mainly due to ploughing, or when large parts of the former heathland were converted to farmland by breaking up the hardpan horizons of the podsol soil in the early 20th century. The golden age of PRIA research in Harburg county lasted from the 1930s until 1977. PRIA cemeteries and the accompanying grave rituals are well known because Willi Wegewitz, director of the regional Helms-Museum at the time and a student of the renowned PRIA researcher, Gustav Schwantes, excavated and published a range of them. In fact, this was Wegewitz's major field of research. He started his archaeological career in the 1920s in the county of Stade, excavating the urn cemeteries of Harsefeld and Bargstedt, and from the 1930s onwards he carried out several rescue and research excavations in Harburg county. The burial sites of Dohren, Ehestorf-Vahrendorf, Putensen and Tostedt-Wüstenhöfen (Wegewitz 1944; 1961; 1962; 1964; Putensen was re-analysed by Eger 1999) are well-known sites today and are complemented by cemeteries that are located just outside the borders of present-day Harburg county, although they were excavated by Helms-Museum: Daensen, Soderstorf, Marmstorf, Langenbek and Wetzen (Wegewitz 1937; 1964; 1965; 1970; Hässler 1976). In 1977, Wegewitz concluded a series of monographies with a publication on the urn cemeteries of the Late Bronze Age and the PRIA in Harburg county (*Urnenfriedhöfe der jüngeren Bronzezeit und der vorrömischen Eisenzeit im Kreise Harburg*), in which he presented the remaining material and summarised previous scientific results (Wegewitz 1977; additional summary in Wegewitz 1988, 69–129). Due to this, we have a comprehensive overview of the PRIA material from Harburg county. Only one large urn cemetery has been excavated since Wegewitz's era – the urnfield at Soderstorf, which was endangered when large parts of the Lüneburger Heide and the archaeological heritage of the region were damaged by British military manoeuvres. Urn cemeteries fell into oblivion in the second half of the 20th century when larger and more efficient agrarian machines were developed. Urns are rarely found today, and, if they are, they have often been heavily damaged by ploughing. In the 2000s, a technique for the deep clearing of stones, mainly on fields meant for potato growing, was introduced, which inevitably destroys any archaeological heritage remaining in the ground. It is estimated that the loss of archaeological heritage on farmland due to modern agrarian techniques over the last few decades must be very large, and it is feared that the era of large-scale excavations of urn cemeteries in Harburg county is irrevocably over.

The Pre-Roman Iron Age in Harburg county: Chronology

Throughout the PRIA, Harburg county was part of the core area of the Jastorf culture, but it transformed into Elbgermanic territory towards the end of the period. The area appears to have been rather densely populated, although settlement interruptions can be observed throughout the period. The chronological framework of the PRIA follows the classification of Gustav Schwantes, with the stages (Wessenstedt), Jastorf, Ripdorf, and Seedorf (Schwantes 1909; 1911), but occasionally the frameworks of Ole Harck and Hans Hingst are used, which subdivide the PRIA into the phases Ia–d and IIa–d (Hingst 1959; Harck 1972/1973; cf. Brandt 2001, 29 fig. 3).

The Wessenstedt stage, also called 'pre-Jastorf', seems to be strongly related to the Late Bronze Age and is considered a transitional stage between the Bronze Age and the Iron Age. Friedrich Laux has proposed a time gap between Wessenstedt and the later Jastorf cemeteries, reviving Schwantes' old theory of the 'Jastorf disruption' (German: *Jastorf-Störung*), which proposes that a migration into northern Lower Saxony took place at the beginning of the PRIA: the so-called Suebic land seizure (German: *Suebische Landnahme*; Laux 2009; cf. Schwantes 1933; 1955, 99–100). Late Bronze Age and Early Iron Age settlements are, however, inseparable, and, except for a few face urns or urns from the Lusatian culture, the ceramics are clearly regional Bronze Age types (Wegewitz 1988, 65–69). The period is thereby characterised by continuity rather than disruption.

https://doi.org/10.2369/9783869354439.beyond-urnfields

The Early PRIA or Jastorf stage can readily be identified if well-preserved urn cemeteries are available. It becomes problematic when the urns have been partly destroyed by ploughing, as is often the case for sites excavated after the 1950–1960s.

The Ripdorf stage, sometimes called Middle PRIA, seems to be underrepresented in the archaeological material (e.g. Wegewitz 1988, 88–89). Some of the larger burial sites that were in use throughout the PRIA contain only a few graves from this stage, and these are sometimes separated spatially from the rest of the graves, as seems to be the case in Putensen (Wegewitz 1973, fig. 25–26; 1977, 31). Schwantes (1958, 381–388) interpreted this as another migration after the one at the beginning of the PRIA. But, once more, cultural and chronological continuity is visible and should be emphasised.

The Seedorf stage dates to the Late PRIA and is broadly represented at a large number of settlements and urn cemeteries. At a number of sites, the Seedorf stage seems to be an independent settlement phase, but, at other sites, both settlements and cemeteries continued to be in use into the Roman Iron Age. This is especially the case when sites were founded only in the final phase of the PRIA, corresponding to Harck IIc–d or Hingst IIc–d (cf. Eger 1999, 200 for the upper Luhe valley).

Comments on terminology

The differentiation between urnfields and urn cemeteries made in this book has not been commonly used in the region so far. Most often, the term *Urnenfriedhof* (urn cemetery) is used, but this is slightly imprecise and is meant as a *pars pro toto* for all cremation cemeteries dating to the Late Bronze Age, the PRIA, the Roman Iron Age and the Migration Period. Whereas the vast majority of PRIA burial sites in the lower Elbe region can be described as urn cemeteries, only a couple of sites can be characterised as actual urnfields (see list below). This might, however, be due to a research gap, because several sites in Harburg county contain small mounds, although such small mounds were also in use in the Early Middle Ages (cf. Brandt et al. 2011, 174–181). Some burial sites located in the eastern strip of the county further complicate the matter because they contain small mounds dating to the Late Roman Iron Age and Early Migration Period. Such sites are known as *Buckelgräberfelder* in German, and they are frequent in the eastern parts of Lower Saxony (cf. Mohnike 2016). Without excavation or single finds, it is not possible to date such small burial mounds.

Cemeteries: Location, size, dating, structure

PRIA cemeteries are found across Harburg county in areas that were advantageous for prehistoric settlement, i.e. the morainic geest (Fig. 1). There seems to be no clear preference for either elevation, relief or soil type, and famous examples include urn cemeteries located on a hill top (Ehestorf-Vahrendorf), adjacent to a river (Putensen), or on the slopes of shallow hills above dried up brooks (Harsefeld or Marmstorf). Further research on this topic is, however, needed.

It has not been possible to establish definite connections between contemporary burial sites and settlements. Likewise, it is not possible to discern the distance between these or to establish whether the cemeteries were the burial sites of a single settlement or a burial centre for a larger settlement unit, as is under discussion for some of the large, famous PRIA urn cemeteries, e.g. Mühlen Eichsen in Mecklenburg-Western Pomerania (Ettel 2014). Older burial grounds were often attractive to the PRIA people, and they used megalithic graves or burial mounds from the Younger Stone Age or the Early Bronze Age for reburials or as starting point for the establishment of new cemeteries.

As elsewhere in the Jastorf core area, burial grounds can be very large, and the largest known sites in Harburg county contain well over 1,000 graves. Ehestorf-Vahrendorf is not completely excavated,

https://doi.org/10.2369/9783869354439.beyond-urnfields

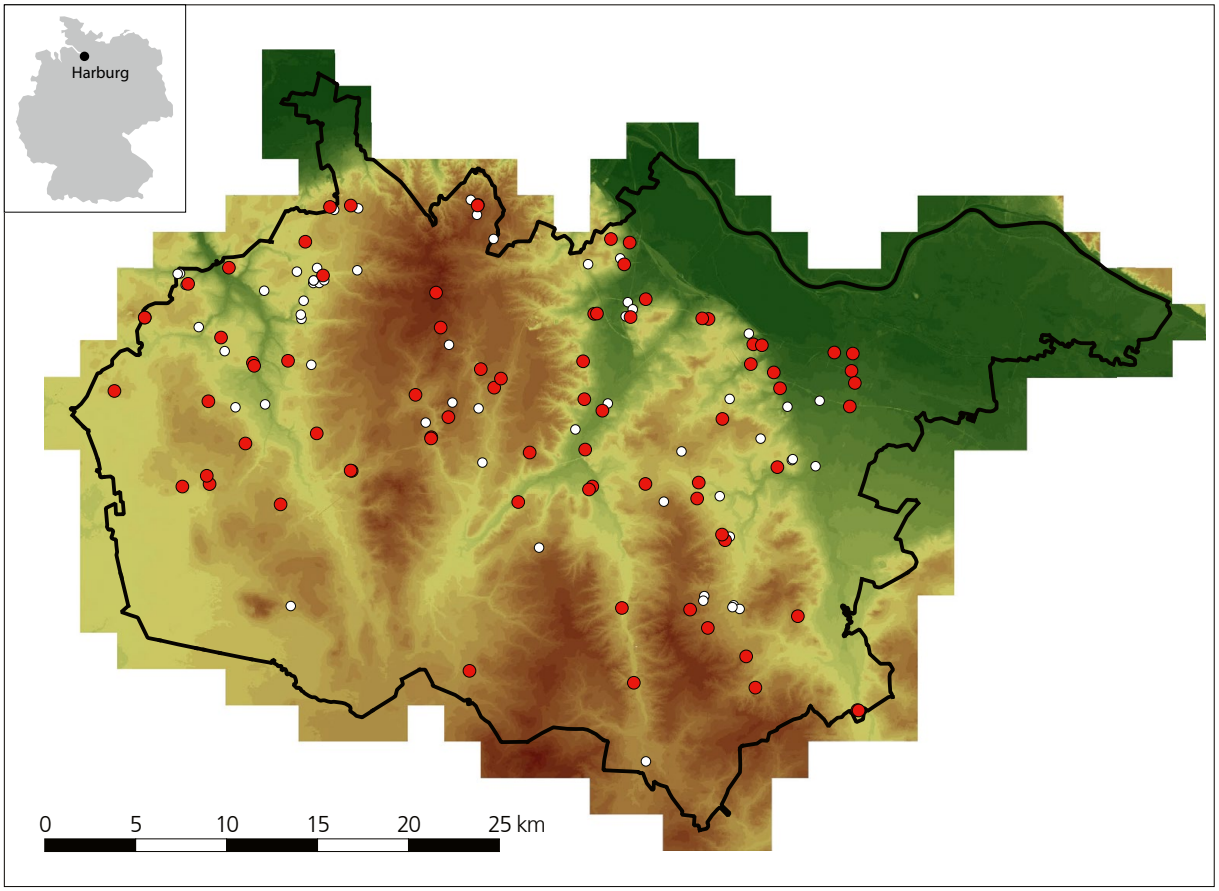


Fig. 1. Urn cemeteries in Harburg county (modern borders). Red dots: PRIA; white dots: Late Bronze Age, Roman Iron Age or Migration Period (graphics J. Brandt).

but it contains at least 1,170 graves, and the two adjacent burial grounds of Putensen – Putensen *Urnenfriedhof* and Putensen *Brandgräberfeld* (see explanation below in the list of cemeteries) – contain 988 and 757 burials, respectively. The numbers for Ehestorf and Putensen *Brandgräberfeld* do, however, include a certain number of Roman Iron Age graves. Several dozens or hundreds of graves seem to have been the rule, with the burial ground at Wetzen with its 73 burials being an example of the smaller cemeteries. It is, however, difficult to provide definite numbers because cemeteries are rarely completely excavated. Frequently, just small parts of them were examined, by chance or during rescue excavations. It is also common that parts of the cemeteries had been destroyed before excavation, often due to gravel mining or deep ploughing.

The extent of the cemeteries can vary largely. On some sites, the graves are closely packed, e.g. at Tostedt-Wüstenhöfen with its more than 250 urns from an area of 30 x 25 m, or at Ehestorf-Vahrendorf. Other sites are more spacious, and the cemeteries can extend over several hundred meters. A combination of densely concentrated groups of urns and areas with a scarcer distribution of urns can even occur at the same site. Cemetery organisation can follow some form of horizontal stratigraphy, which can also be combined with grave groups, as can be observed at Putensen *Urnenfriedhof* (Fig. 2a–b). This site may serve as an example of the complexity that cemetery structures can reach. In the northern part of Putensen, burials spread over a long strip of land, delimited by an ancient trackway to the west and by the River Luhe to the east (Fig. 2a). Graves dating to the Jastorf stage can be found over the entire area but, in some places, the graves form small but tightly-packed groups. Some of the graves are covered with circular stone paving and, in the northwestern part of the cemetery, some

https://doi.org/10.2369/9783869354439.beyond-urnfields

Fig. 2. Putensen Urnenfriedhof, *northern (a) and southern (b) part, in relation to ancient burial mounds 1–3. Circles: stone circles and stone paving of the Jastorf stage; squares: Jastorf stage burials; triangles: Ripdorf stage burials; dots and crosses: Seedorf stage burials (after* Wegewitz *1973, 30 figs. 25–26 and 96 fig. 27).*

of the areas of stone paving clearly form a group, while further to the south they are arranged more loosely. This northwestern part of the cemetery was re-used during the Seedorf stage, when a large number of urns were buried in the middle of the northern part of Putensen, especially around a large circular stone-paved area of the Jastorf stage. In addition, singular Seedorf urns are located in between Jastorf burials. The southern part of Putensen is organised with even more complexity (Fig. 2b). Here, a small group of Jastorf urns was buried in flat graves between three ancient burial mounds, with four secondary urn burials in the periphery of mound number 1. During the Ripdorf stage, another urn was buried here, in addition to a couple of secondary burials in mound number 3 and a couple of urns nearby, which were in flat graves. During the Seedorf stage, the northern part of the site was re-used, while a large number of tightly-packed urns were buried between mounds 2 and 3, spreading from the former Jastorf burial group to the north and south and following the ancient trackway, which delimits the site to the west. In my opinion, it is not clear if the northern and southern part of the site form a single cemetery. During the Seedorf stage, Putensen *Brandgräberfeld* was established just 50 m away on the western side of the ancient trackway. This site might be interpreted

https://doi.org/10.2369/9783869354439.beyond-urnfields

as a third part of Putensen *Urnenfriedhof*, following a horizontal stratigraphy from north (PRIA) to south (Roman Iron Age), with graves of the earlier and later Seedorf stages being rather intermingled (cf. Eger 1999, esp. map 71). The overall site development can be described as following: The Jastorf stage has two focal points in the northern and the southern part of the *Urnenfriedhof*, followed by the Ripdorf stage, during which only a few graves were created in the southern part of the *Urnenfriedhof*, followed by the Seedorf stage, which is present in three separate areas, two at the *Urnenfriedhof* and a third one at the *Brandgräberfeld*, with only the latter continuing into the Roman Iron Age. In my opinion, this might reflect reorganisations in the settlement structure, not ethnic migrations, as Wegewitz thought. Corresponding to this idea, on the basis of his overall settlement study in the upper Luhe valley, Eger (1999, 195–197) argued that in the Early PRIA each farmstead was related to a single small-sized burial site. The larger cemeteries of the Late PRIA indicate that several farmsteads used these burial sites together, but, as Putensen and nearby Wetzen show, without melding into one single burial community. Accordingly, and due to the circumstance that burial sites can be found every 3 to 5 km, Eger (1999, 199) avoids the term 'central burial site' (German: *Zentralfriedhof*). Eger is not able to explain the kind of process that led to the foundation of sites like Putensen.

Burial rites

Urn graves were the dominant burial form throughout the PRIA in Harburg county. Occasionally, we find cremation deposits (German: *Leichenbrandlager*), while other types of cremation burials known from the PRIA in the rest of northern Germany, Poland, or southern Scandinavia are missing completely. The urns from the Wessenstedt and Jastorf stages of the Early PRIA are regularly protected by stone settings, a ritual feature that was introduced in the Late Bronze Age (Fig. 3). Occasionally, capstones might have been visible, but graves were rarely marked on the surface. If they were, this was done by laying stone paving or erecting stone circles above the urns, as is the case in Soderstorf or Putensen (Fig. 3), and as it is also known from the Jastorf core area as well as in Scandinavia and Pomerania. Erecting small mounds of maybe 3–5 m diameter and not more than 0.5 m high, thus representing urnfields in the definition of this book, was a custom in the early part of the PRIA and was probably linked to the Late Bronze Age. Cemeteries may contain up to 150 of these small urnfield mounds, but based on relative typochronology alone it is difficult to say if these mounds were the only grave form in the Early Iron Age, as suggested by Laux (2009, 78–80), or if urn graves placed in between the mounds might be of the same age.

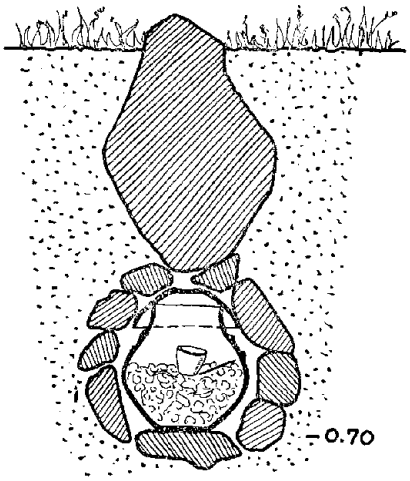


Fig. 3. Dohren urnfield, grave 154. A typical Jastorf grave with an urn covered by a ceramic bowl and placed within a stone setting. A small accessory vessel and a pin with a lentil-shaped head were found in the urn. A stone stele probably marked the grave on the surface (after Wegewitz 1961, 29 fig. 7).

Throughout the Early PRIA, urns could be covered with bowls, and, during the Ripdorf and Seedorf stages, they were apparently often covered with some kind of wooden lid, as is evidenced by small, looped iron cramps found in the upper part of the urns (German: *Holzdeckelhandhaben*; e. g. Wegewitz 1962, 20; 1973, 151).

The burial grounds of Harburg county seem to have been a kind of hotspot for the use of Roman and Romano-Celtic metal vessels as urns; a custom that started no later than the Early Seedorf stage. It seems to have been a regional custom that Roman metal cauldrons and buckets, or even local ceramic vessels, were deliberately damaged when they were converted into urns,

https://doi.org/10.2369/9783869354439.beyond-urnfields

sometimes by removing handles or pedestals (e.g. Brandt 2001, 123–124; Wegewitz 1988, 77–78, 96–99; the same can be seen in southern Holstein, north of the Elbe, cf. Tromnau 1975, 86).

Weapon graves, in which swords, lances and shield bosses were placed in, next to, or even below the urns, from before the Late Seedorf stage have not been found (Brandt 2001, 132–133). Figure 4 depicts a good example of this from the cemetery of Marmstorf. Here, a set of weapons was deposited on a small stone-paved area next to a Seedorf-stage urn. The deposition contained a single-edged sword that had been folded, a shield, a lance, a spear and a large knife. A shield boss had been placed upside down and inside were found a Late La Tène fibula, a halfmoon-shaped razor, a belt buckle and an awl. Occasionally, weapons were buried in an area between a couple of graves, making it unclear if they are grave goods belonging to one of the deceased or if they are ritual depositions (German: *Waffenlager*; e.g. Wegewitz 1988, 99–103).

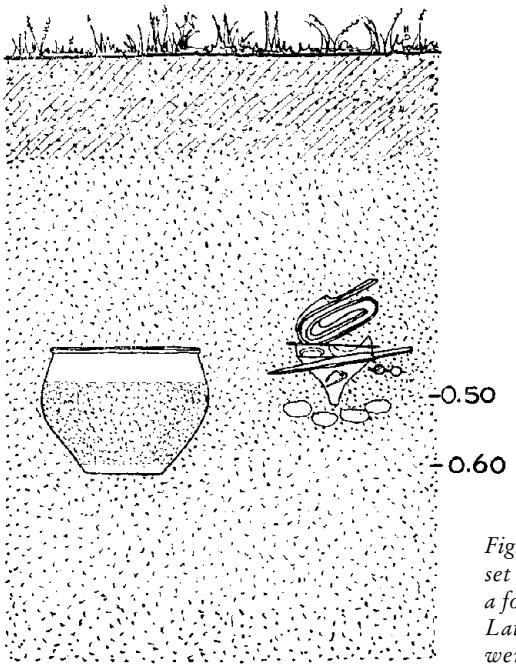


Fig. 4. Marmstorf urn cemetery, grave 265. Next to a Seedorf-stage urn, a set of weapons was deposited on a small area of stone paving, containing a folded single-edged sword, a shield, a lance, a spear and a large knife. A Late La Tène fibula, a halfmoon-shaped razor, a belt buckle and an awl were found in a shield boss (after Wegewitz 1964, 29 fig. 14).

The discussion about the separation of burial sites based on gender in the Late PRIA and especially the Roman Iron Age in the Elbgermanic territory, to which Harburg county belongs, is well known (Bantelmann 1978, 337–338 with 341 fig. 2; Derks 1992; Eger 1999, 126–129). Based on two famous urn cemeteries in eastern Lower Saxony, Schwantes invented the terms 'Darzau' and 'Rieste' groups for the phenomenon (Schwantes 1939). Urn cemeteries of the Rieste group that contain weapons and metal vessels or vessels of the *Terrine* type are supposed to represent the male part of a population, whereas urn cemeteries of the Darzau group that contain jewelry and vessels of the *Töpfe* type are supposed to represent the female one (Wegewitz 1977, 35–37; 1988, 82–83, 85 fig. 115). In the lower Elbe region, the Rieste group is represented by the sites Ehestorf-Vahrendorf and Marmstorf, and the Darzau group by Tostedt-Wüstenhöfen and Wetzen (cf. Wegewitz 1988, 85 fig. 115). The Seedorf phase in Putensen, on the other hand, shows characteristics of both Rieste and Darzau, thus confirming that the former, simple, male-female-dichotomy is too simplistic, which is also supported by osteological analyses of cremated bones (see also Derks 1992; Eger 1999, 126–129).

https://doi.org/10.2369/9783869354439.beyond-urnfields

As expected, the PRIA burial sites in Harburg county contain grave goods typical of the Jastorf culture. Individual artefact types were often in use for long periods, appearing in several sub-phases of the typo-chronologies established by Hingst (1959), Keiling (1969), and Harck (1972/1973). Grave goods are scarce and consist mainly of dress pins and belt hooks from the Early PRIA, before the pins were exchanged for La Tène-style fibulas in the Late PRIA.

Grave goods are extremely rare from the Wessenstedt stage and consist of rectangular or half-moon-shaped razors, different pin types with a swan's neck and heads shaped as bowls or bombs, Wendel neck rings, eyelet rings and early tongue-shaped belt hooks. Razors and pins can be made of bronze or iron (Schneider 2009, 44–46 with fig. 2). Small accessory vessels can be found in the urns.

From the Jastorf stage, grave goods consist of a large range of pin types made out of iron or bronze or, more rarely, bone. The pins can have a straight shaft or a neck bend (German: *Nadeln mit geradem Schaft* resp. *Gekröpfte Nadeln*), and the heads are mainly in the shape of a ring, rolled in, bomb, nail, disc, rod, or ball (German: *Ringkopfnadeln*, *Rollenkopfnadeln*, *Bombenkopfnadeln*, *Nagelkopfnadeln*, *Scheibenkopfnadeln*, *Stabkopfnadeln*, *Kugelkopfnadeln*). In the later part of the Jastorf stage, a few Hallstatt-inspired fibulas or regional forms of fibulas decorated with plates are also found. Belt equipment includes tongue-shaped belt hooks used in combination with a ring, which can be fitted with a clamp and are in use throughout the PRIA. Sometimes, tweezers are found, and jewelry items include sail- or spiral-shaped earrings (German: *Segelohrringe*, *Spiralohrringe*) and, more rarely, neck rings. The inclusion of accessory vessels is continued from the previous Wessenstedt stage.

The Ripdorf stage is characterised by a general lack of grave goods in Harburg county. Late dress pin types (Holstein pins and winged head pins [German: *Flügelnadeln*]) were in use and the first La Tène fibulas appear, although they are extremely rare. Early La Tène artefact types, such as neck or arm rings, found elsewhere in the southern Jastorf groups, are completely missing. An exception is a single La Tène-style torque, which was found at Ardestorf. Belt hooks were now equipped with sidewards protruding clamps (German: *Haftarmgürtelhaken*). An exceptional find is known from Ehestorf-Vahrendorf, where 15 bear claws were found in a classical Ripdorf vessel (*Terrine*), probably the remains of a bear skin that had been put on the pyre (Fig. 5).

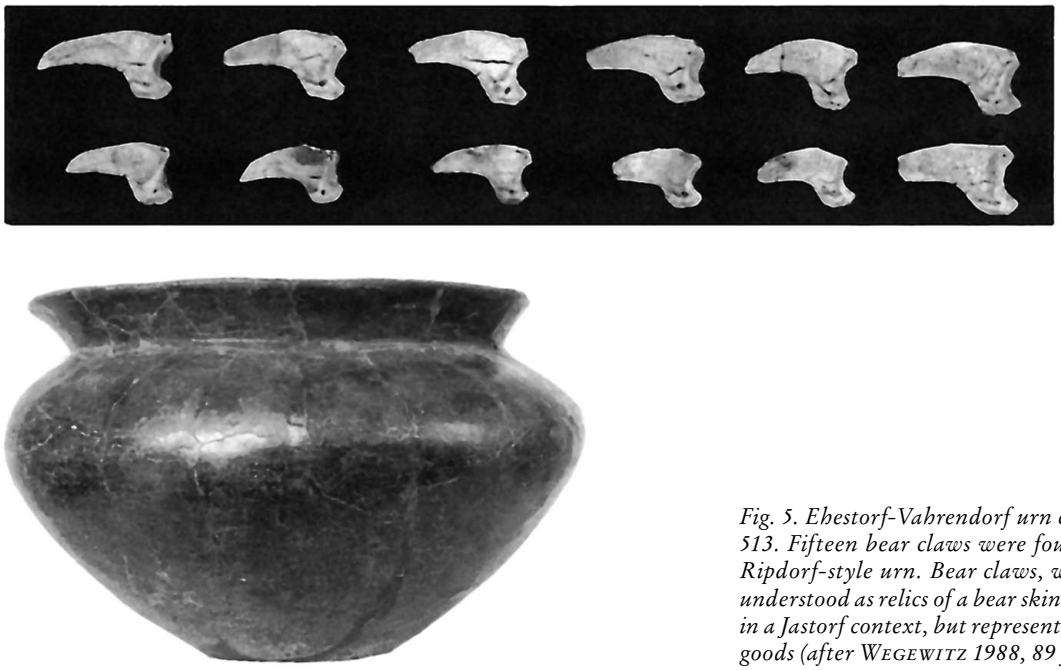


Fig. 5. Ehestorf-Vahrendorf urn cemetery, grave 513. Fifteen bear claws were found in a typical Ripdorf-style urn. Bear claws, which should be understood as relics of a bear skin, are not unique in a Jastorf context, but represent very rare grave goods (after Wegewitz 1988, 89 fig. 117).

https://doi.org/10.2369/9783869354439.beyond-urnfields

During the Seedorf stage, a variety of middle and late-type La Tène-shaped fibulas were in use. This is indicated by sporadic finds of fibulas with balls on the bow and widespread finds of Kostrzewski K fibulas (Kostrzewski 1919). In the late part of the Seedorf stage (Seedorf 3 after Schwantes, stage IIc–d after Harck or Hingst; cf. Brandt 2001, 29 fig. 3) rectangular-shaped fibulas, also known as Langobardian fibulas, and Kostrzewski Var. M/N were very popular in the region (Fig. 6). Plate-shaped belt hooks are common in the early part of the Seedorf stage, but they went out of use before the final phase of Seedorf. A completely new set of grave goods appears in the Seedorf stage that had not been in use during the earlier stages of the PRIA – from the beginning of the Seedorf stage, bronze cauldrons with an iron rim and, slightly later, Roman buckets with heart- or dolphin-shaped handle attachments and bronze bowls were already being repurposed as urns. This tradition pre-dates one of the typical features of rich Roman Iron Age graves, but it must be emphasised that in PRIA contexts there are no accumulations of particularly rich or exceptional grave goods. Weapons appear in the late part of the Seedorf stage, mainly consisting of shields and lances, while single-edged swords and two-edged swords of Middle and Late La Tène types remain few in number. Along with these, drinking-horn fittings can be found, which can also be viewed as predecessors of the rich Roman Iron Age grave furnishings. Towards the end of the PRIA, iron razors of half-moon shape or bowed ones with a tang, iron scissors and bone pins can be found. A handful of belt hooks with a hole or three rings and a single rod-shaped specimen belong to the same period, all uncommon to northern Germany and probably of Late Celtic origin.

Fig. 6. Wetzen urn cemetery, grave 1. Rectangular or Langobardian fibula from the Late Seedorf stage (photo © Archaeological Museum Hamburg).

Catalogue of cemeteries

Ardestorf (Harburg county)
Urn cemetery. Relatively dated to the Jastorf-Ripdorf stages. The cemetery is located on a shallow hill and contained 80 burials, but a large number had probably been destroyed previously by gravel mining. The burial area measures at least 130 x 90 m (Wegewitz 1977, 117–136).

Bargstedt (Stade county)
Urn cemetery. Relatively dated to the Jastorf stage – Early Roman Iron Age. The cemetery is located on rather flat terrain and contained 291 urn graves and 13 cremation deposits. The burial area measures at least 40 x 25 m. Cemetery organisation follows a horizontal stratigraphy from west to east, combined with additional grave groups. Darzau-type (Hässler 1977, volume II).

https://doi.org/10.2369/9783869354439.beyond-urnfields

Buchholz (Harburg county)
Urnfield. Relatively dated to the Early Iron Age. There are 147 small mounds of 2–6 m diameter with a height of 0.1–0.3 m. The cemetery is located in heathland and was largely destroyed in 1939 by deep ploughing. Forty-eight graves were excavated at that time, but the finds got lost during the Second World War (Wegewitz 1977, 156–157, 242–243).

Daensen (Stade county)
Urn cemetery. Relatively dated to the Jastorf-Ripdorf stages. The cemetery is located just above the eastern slope of the River Este. Around 50 urn graves and two cremation deposits have been excavated. A group of 20 burial mounds is located near the cremation graves and the larger of these probably date to the Younger Stone Age or the Early Bronze Age, but some mounds with diameters from 3.5–6.5 m may belong to a larger urnfield. The urn cemetery is partially excavated; the burial area measures at least 90 x 40 m (Wegewitz 1961, 49–61).

Dohren (Harburg county)
Urnfield. Relatively dated to the Early PRIA – Jastorf b. The cemetery is located on rather flat terrain, 1 km west of the River Este, and measures at least 100 x 60 m. More than 250 urn graves and eight cremation deposits have been found in between 26 small burial mounds, dating to the Wessenstedt stage. In between the graves are areas with non-burial pits covered by stone paving. Occasionally, the stone paving contained grinding stones which, according to Wegewitz, should be seen as part of the burial ritual. A famous find from one of the urns is a pair of two identical bronze objects, shaped as a bow with a pair of large spirals at each end (Fig. 7). The objects lack comparable finds from a Jastorf context, but Wegewitz has suggested that they might have Hungarian parallels, although their function is unknown (Wegewitz 1961).

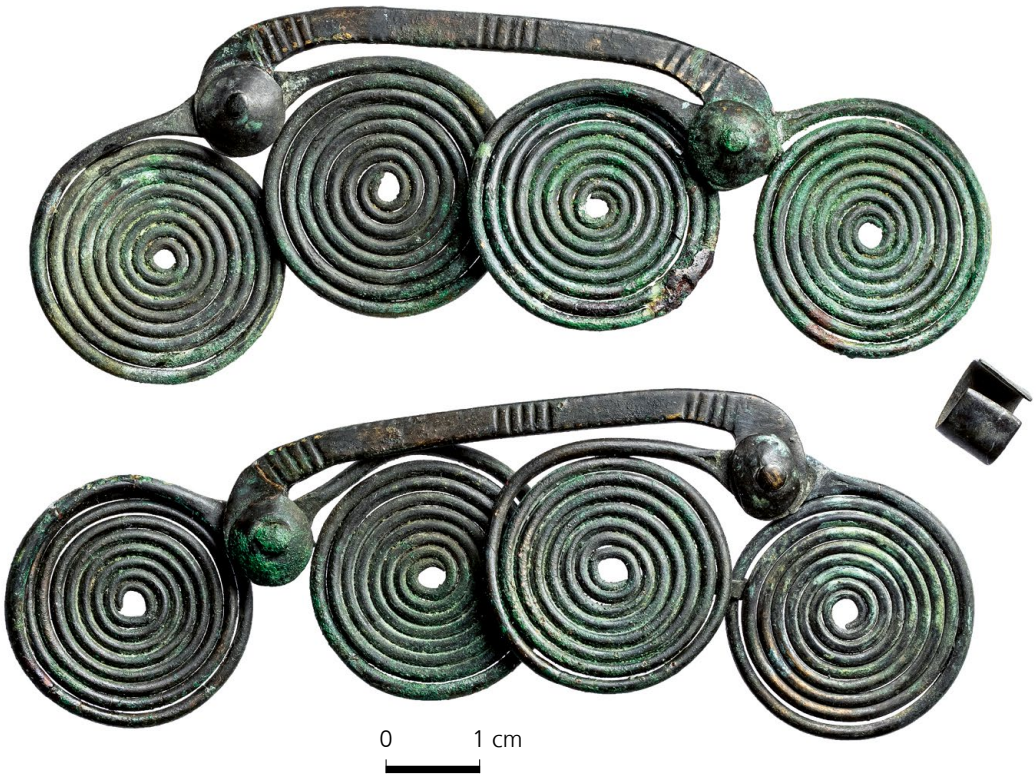


Fig. 7. Dohren urnfield, grave 3. A unique pair of two identical bronze objects of unknown function found within a Jastorf stage urn (photo © Archaeological Museum Hamburg).

https://doi.org/10.2369/9783869354439.beyond-urnfields

Ehestorf-Vahrendorf (Harburg county)
Urn cemetery. Relatively dated to the Jastorf stage – Early Roman Iron Age. The cemetery is located on top of the Kiekeberg hill, close to a Bronze Age burial mound, and measures at least 50 x 20 m. More than 1,170 graves have been excavated, most of these are urn graves but there are also a few cremation deposits; some of the urns were metal vessels. Wegewitz (1977, 10) has suggested that the graves can be ordered into family groups. The cemetery contains a surprisingly large number of urn graves dating to the Ripdorf stage, although they are without grave goods. Weapon graves occur in the later part of the Seedorf stage and the Roman Iron Age (Wegewitz 1962; 1988, 76–103).

Harsefeld (Stade county)
Urn cemetery. Relatively dated to the Jastorf stage – Early Roman Iron Age. The cemetery is located on the southeastern slope of a ridge, above a small brook. It is partly excavated but several hundred graves had probably been destroyed before the excavations in 1927–1929. The burial area measures at least 70 x 40 m and contained more than 250 urn graves. Twenty-one of these had imported metal vessels as urns, and weapons were present in more graves. The cemetery belongs to the Rieste group (Wegewitz 1937, 6–127).

Langenbek (area of Hamburg-Harburg)
Urn cemetery. Relatively dated to the Seedorf stage – Early Roman Iron Age. The cemetery is located on the rather steep southern slope of a small hilltop and measures at least 50 x 20 m. A rescue excavation uncovered more than 200 urn graves, but a lot more are believed to have been destroyed prior to this. The cemetery expanded from the northeast to the southwest, with the later part dating mainly to the Roman Iron Age. As in Marmstorf, there are a couple of weapon deposits. An urn dating to the Early Roman Iron Age contained a pilum, i.e. throwing spear used by the Roman army. The cemetery belongs to the Rieste group (Wegewitz 1965).

Marmstorf (area of Hamburg-Harburg)
Urn cemetery. Relatively dated to the Late Bronze Age – Jastorf b, but a part of the cemetery was re-used in the final part of the PRIA – Early Roman Iron Age. The cemetery is located on the southern slope of the Krönenbarg hill above a small, dry valley; the burial area measures at least 100 x 80 m. Approximately 260 urn graves have been excavated near a destroyed burial mound. The burial mound was large but is undated. The majority of the graves probably date to the Late Bronze Age and Early PRIA, whereas *c.* 100 graves date to the Late PRIA and Early Roman Iron Age. Some graves contained weapons and metal vessels dating to the Roman Iron Age, demonstrating that the later part of the cemetery belongs to the Rieste group. Weapon deposits were frequently laid between, outside or underneath urns (Wegewitz 1964).

Putensen Brandgräberfeld[1] *(Harburg county)*
Urn cemetery. Relatively dated to the Seedorf stage – Late Roman Iron Age. The cemetery is located on morainic lowland, just above the floodplain of the River Luhe, close to an ancient trackway, and measures at least 75 x 20 m. Excavations have uncovered 982 graves, 321 of these cremation deposits probably dating to the Roman Iron Age. A large part of the burial site is covered by extensive stone paving, complemented with stone stelae, under which urns as well as cremation deposits were found.

1 The two burial sites at Putensen lie next to one another. In fact, they are only separated by an ancient trackway. Wegewitz proposed that they are the cemeteries of two populations and, in order to differentiate between the two sites, he named one of them *Urnenfriedhof* (urn cemetery), and the other one, due to the particularly large amount of cremation deposits, *Brandgräberfeld* (cremation cemetery). The differentiation seems to be arbitrary.

https://doi.org/10.2369/9783869354439.beyond-urnfields

Weapon graves and graves with metal vessels are dated to the last part of the PRIA and the Roman Iron Age. Horizontal stratigraphy runs from north to south, but some of the graves are further organised in groups, including graves containing metal vessels. The cemetery lies next to that of Putensen *Urnenfriedhof* and belongs to the Rieste group (Wegewitz 1972; Eger 1999).

Putensen Urnenfriedhof *(Harburg county)*
Urn cemetery. Relatively dated to the Jastorf – Seedorf stages. Located next to Putensen *Brandgräberfeld*. The cemetery measures at least 200 x 20 m; it follows the same ancient trackway as Putensen *Brandgräberfeld* at a length of 200 m and extends to both sides of two Bronze Age burial mounds, while a third mound marks the southern border of the site. Its northern part is delimitated by the ancient trackway on one and the River Luhe on the other side. A unique feature in the lower Elbe region is a stone wall, which apparently ran towards the river. The cemetery contained about 220 urn graves dating to the Jastorf stage and 530 urn graves and 25 cremation deposits dating to the Seedorf stage. About 12 urns dating to the Ripdorf stage were interred as secondary burials in or next to a large burial mound (cf. Fig. 2). The cemetery features extensive stone settings with 48 circular paved areas measuring up to 3.5 m in diameter. These cover urns or cremation deposits and are connected to other circular stone settings by additional large paved areas. The burials are organised in groups, in addition to an overall horizontal stratigraphy that progressed from north to south over time. The cemetery contains grave goods belonging to both the Rieste and the Darzau groups (Wegewitz 1973; Eger 1999).

Schwiederstorf (Harburg county)
Urnfield. Relatively dated to the Early Iron Age. Fifty-five burial mounds on a ridge. The burial area measures 200 x 50 m. Some of the mounds have diameters from 8–10 m and probably date to the Bronze Age. Most of the mounds measure only 3–4 m in diameter, are extremely flat and can be described as urnfield graves. Just one of the urnfield mounds was excavated in 1948; it contained an urn from the Early Iron Age, which was covered by a stone setting (Wegewitz 1977, 233–235).

Soderstorf (Lüneburg county)
Urn cemetery. Relatively dated to Jastorf a–b. The cemetery is located on slightly elevated terrain above the River Luhe, close to a megalithic grave and a large Bronze Age burial mound. The burial area measures at least 60 x 45 m, but less than half of the cemetery is believed to have been excavated. The cemetery contains *c.* 280 burials and it is famous for its large number of stone settings, which consist of circles, circular paved areas and stelae circles, with groups of urn graves placed in between. Soderstorf is one of a few burial sites mentioned in this paper where the cremated remains have been anthropologically examined. Here, it can be argued that certain burial rites can be related to the age and gender of the deceased. While people of all ages and genders were buried in flat graves or in graves marked by stelae circles, only the graves of women, adolescents and children were covered by circular paved areas (Hässler 1976).

Tangendorf (Harburg county)
Urnfield. Relatively dated to the Late Bronze Age – Early PRIA. The cemetery is located on the southern slope above a strip of lowland meadows, between a couple of burial mounds lying to the west and north. The burial area measures at least 300 x 100 m; 60 small burial mounds with diameters of 3–5 m are located along a 300 m transect. More graves were destroyed by agriculture and gravel mining in the 1930s (Wegewitz 1977, 90–102).

https://doi.org/10.2369/9783869354439.beyond-urnfields

Tostedt-Wüstenhöfen (Harburg county)
Urn cemetery. Relatively dated to the Seedorf stage – Early Roman Iron Age. The cemetery is located on the northern edge of rather flat terrain, north of a small brook. The burial area measures at least 30 x 25 m. Excavations have uncovered 255 urn graves, of which *c.* 25 % date to the PRIA. The graves are located in between a large group of small to large burial mounds and are organised following a horizontal stratigraphy from north to south. The cemetery belongs to the Darzau group (Wegewitz 1944).

Trelde-Sprötze (Harburg county)
Urn cemetery. Relatively dated to the Jastorf stage. The cemetery is located on the northern slope of a small brook, east of eight undated burial mounds. The burial area measures at least 80 x 30 m, but the cemetery has only been partially examined, leaving a large strip of terrain between the two excavated areas. The excavation revealed *c.* 70 urn graves (Wegewitz 1977, 272–284).

Wetzen (Lüneburg county)
Urn cemetery. Relatively dated to the Late Seedorf stage. The cemetery is located on a flat terrain above a small brook and close to the River Luhe. The burial area measures at least 45 x 45 m and contained *c.* 75 urn graves and two cremation deposits. The cemetery belongs to the Darzau group (Wegewitz 1970).

Bibliography

Bantelmann 1978: N. Bantelmann, Zur Abgrenzung und Interpretation archäologischer Fundgruppen der älteren römischen Kaiserzeit im freien Germanien. Bonner Jahrbücher 178, 1978, 335–346.

Brandt 2001: J. Brandt, Jastorf und Latène. Kultureller Austausch und seine Auswirkungen auf soziopolitische Entwicklungen in der vorrömischen Eisenzeit. Internationale Archäologie 66 (Rahden/Westf. 2001).

Brandt et al. 2011: J. Brandt/W. Dörfler/A. Hüser/K. Richter/J. Subbert, Die spätsächsischen Gräber von Buchholz-Vaensen und Neu Wulmstorf-Elstorf – Neue Untersuchungen zum Frühmittelalter im Landkreis Harburg. Hammaburg N. F. 16, 2011, 159–192.

Derks 1992: H. Derks, Das Gräberfeld von Tostedt-Wüstenhöfen: Zur Frage geschlechtsspezifischer Bestattungsplätze. Unpubl. Magistral thesis, Hamburg University (Hamburg 1992).

Eger 1999: C. Eger, Die jüngere vorrömische Eisen- und römische Kaiserzeit im Luhetal (Lüneburger Heide). Internationale Archäologie 56 (Rahden/Westf. 1999).

Ettel 2014: P. Ettel, Das Gräberfeld von Mühlen Eichsen, Mecklenburg-Vorpommern. Zum Stand der Ausgrabung, Aufarbeitung und Auswertung. In: J. Brandt/B. Rauchfuß (eds.), Das Jastorf-Konzept und die vorrömische Eisenzeit im nördlichen Mitteleuropa. Beiträge der Internationalen Tagung zum einhundertjährigen Jubiläum der Veröffentlichung der „Ältesten Urnenfriedhöfe bei Uelzen und Lüneburg" durch Gustav Schwantes, 18.–22.05.2011 in Bad Bevensen. Veröffentlichung des Helms-Museums, Archäologisches Museum Hamburg, Stadtmuseum Harburg 105 (Hamburg 2014) 169–204.

Harck 1972/1973: O. Harck, Nordostniedersachsen vom Beginn der jüngeren Bronzezeit bis zum frühen Mittelalter. Materialhefte zur Ur- und Frühgeschichte Niedersachsens 7 (Hildesheim 1972/1973).

Hässler 1976: H.-J. Hässler, Ein Urnenfriedhof der vorrömischen Eisenzeit bei Soderstorf, Kreis Lüneburg, in Niedersachsen. Grabungsabschnitt 1. Die Urnenfriedhöfe in Niedersachsen 12 (Hildesheim 1976).

Hässler 1977: H.-J. Hässler, Zur inneren Gliederung und Verbreitung der vorrömischen Eisenzeit im südlichen Niederelbegebiet. Materialhefte zur Ur- und Frühgeschichte Niedersachsens 11 (Hildesheim 1977).

Hingst 1959: H. Hingst, Vorgeschichte des Kreises Stormarn. Veröffentlichungen des Landesamts für Vor- und Frühgeschichte Schleswig. Vor- und frühgeschichtliche Denkmäler und Funde in Schleswig-Holstein V (Neumünster 1959).

Keiling 1969: H. Keiling, Die vorrömische Eisenzeit im Elde-Karthane-Gebiet (Kreis Perleberg und Kreis Ludwigslust). Beiträge zur Ur- und Frühgeschichte der Bezirke Rostock, Schwerin und Neubrandenburg 3 (Schwerin 1969).

Kostrzewski 1919: J. Kostrzewski, Die ostgermanische Kultur der Spätlatènezeit. 1. Teil. Mannus-Bibliothek 18 (Leipzig, Würzburg 1919).

Laux 2009: F. Laux, Zur Problematik des Überganges von der Endbronzezeit/frühen Eisenzeit (Wessenstedt) zur älteren vorrömischen Eisenzeit (Jastorf) im Lüneburgischen. In: W. Budesheim/H. Keiling (eds.), Die Jastorf-Kultur. Forschungsstand und kulturhistorische Probleme der vorrömischen Eisenzeit. Beiträge für Wissenschaft und Kultur 9 (Wentorf bei Hamburg 2009) 69–107.

https://doi.org/10.2369/9783869354439.beyond-urnfields

Mohnike 2016: K. Mohnike, Reading the signs – Zu spätkaiser- bis völkerwanderungszeitlicher Grabkeramik aus dem ostniedersächsischen Ilmenaugebiet. Siedlungs- und Küstenforschung im südlichen Nordseegebiet 39, 2016, 37–74.

Schwantes 1909: G. Schwantes, Die Gräber der ältesten Eisenzeit im östlichen Hannover. Prähistorische Zeitschrift 1, 1909, 140–162.

Schwantes 1911: G. Schwantes, Die ältesten Urnenfriedhöfe bei Uelzen und Lüneburg. Die Urnenfriedhöfe in Niedersachsen 1 (Hannover 1911).

Schwantes 1933: G. Schwantes, Die suebische Landnahme. Forschungen und Fortschritte 9, 1933, 197–198.

Schwantes 1939: G. Schwantes, Die Urnenfriedhöfe vom Typ Rieste und Darzau. Mecklenburg 34, 1939, 134–140.

Schwantes 1955: G. Schwantes, Jastorf und Latène. Kölner Jahrbuch für Vor- und Frühgeschichte 1, 1955, 75–112.

Schwantes 1958: G. Schwantes, Die Gruppen der Ripdorf-Stufe. Jahresschrift für mitteldeutsche Vorgeschichte 41/42, 1958, 334–388.

Tromnau 1975: G. Tromnau, Bronzekessel von einem eisenzeitlichen Urnenfriedhof bei Klein-Wesenberg, Kreis Stormarn. Hammaburg N. F. 2, 1975, 77–92.

Wegewitz 1937: W. Wegewitz, Die langobardische Kultur im Gau Moswidi (Niederelbe) zu Beginn unserer Zeitrechnung. Die Urnenfriedhöfe in Niedersachsen 2 (Hildesheim 1937).

Wegewitz 1944: W. Wegewitz, Der langobardische Urnenfriedhof von Tostedt-Wüstenhöfen im Kreise Harburg. Die Urnenfriedhöfe in Niedersachsen II,5–6 (Hildesheim 1944).

Wegewitz 1961: W. Wegewitz, Die Urnenfriedhöfe von Dohren und Daensen im Kreise Harburg. Die Urnenfriedhöfe in Niedersachsen 5 (Hildesheim 1961).

Wegewitz 1962: W. Wegewitz, Der Urnenfriedhof von Ehestorf-Vahrendorf im Kreise Harburg aus der vorrömischen Eisen- und der älteren römischen Kaiserzeit. Die Urnenfriedhöfe in Niedersachsen 6 (Hildesheim 1962).

Wegewitz 1964: W. Wegewitz, Der Urnenfriedhof von Hamburg-Marmstorf. Die Urnenfriedhöfe in Niedersachsen 7 (Hildesheim 1964).

Wegewitz 1965: W. Wegewitz, Der Urnenfriedhof von Hamburg-Langenbek. Die Urnenfriedhöfe in Niedersachsen 8 (Hildesheim 1965).

Wegewitz 1970: W. Wegewitz, Der Urnenfriedhof von Wetzen, Kreis Harburg, und andere Funde aus dem 1. Jahrhundert v. Chr. im Gebiet der Niederelbe. Die Urnenfriedhöfe in Niedersachsen 9 (Hildesheim 1970).

Wegewitz 1972: W. Wegewitz, Das langobardische Brandgräberfeld von Putensen, Kreis Harburg. Die Urnenfriedhöfe in Niedersachsen 10 (Hildesheim 1972).

Wegewitz 1973: W. Wegewitz, Der Urnenfriedhof der älteren und jüngeren vorrömischen Eisenzeit von Putensen, Kreis Harburg. Die Urnenfriedhöfe in Niedersachsen 11 (Hildesheim 1973).

Wegewitz 1977: W. Wegewitz, Die Urnenfriedhöfe der jüngeren Bronze-, der frühen und der vorrömischen Eisenzeit im Kreis Harburg. Die Urnenfriedhöfe in Niedersachsen 13 (Hildesheim 1977).

Wegewitz 1988: W. Wegewitz, Rund um den Kiekeberg. Vorgeschichte einer Landschaft an der Niederelbe. Hammaburg N. F. 8, 1988.

Jochen Brandt
Archäologisches Museum Hamburg
Hamburg
Germany
brandt@amh.de

https://doi.org/10.2369/9783869354439.beyond-urnfields

Grave groups in Late Bronze and Early Iron Age grave fields – the grave field at Pinnow as an example of a phenomenon

Wenke Domscheit

Keywords: Northern Germany, grave field, collectivity, memory, communication

Abstract: Grave groups in Late Bronze and Early Iron Age grave fields can be described as a multiple group-wise arrangement of graves, which are separated from one another by areas with no records. Grave groups are interpreted as the burial sites of individual families, clans or settlement communities, which expressed their individual togetherness in their burial tradition. Based on the grave field at Pinnow (Lkr. [German: Landkreis = *district] Ludwigslust-Parchim, Mecklenburg-Western Pomerania), this northern central European phenomenon is explained and discussed by the use of further examples. The focus is on the sometimes long period of individual burial ground use and the associated observance of the respective occupancy structures, as well as the simultaneous use of the grave groups and the sometimes densely clustered burials. Above all, the question of whether other social and societal structures besides family relations could have been a deciding factor in the arrangement of the graves into groups is discussed. Grave groups as part of the occupancy structure are also discussed as a form of communication, which is closely related to the collective memory of the Bronze and Iron Ages.*

Introduction – the beginning

Around the middle of the Bronze Age, about 1300 BC, a process of cultural change took place throughout Europe, which was primarily reflected in the prevailing burial tradition and manifested itself in the change from inhumation to cremation. Before that, inhumation graves in barrows, which were mostly intended for individuals, were the dominant type of burial in northern Germany (Holste 1953, 87; Struve 1971, 30; Keiling 1999, 26; Endrigkeit 2014, 17, 170). This changed with the onset of cremation, which did not initially lead to a compelling change in the grave constructions. This means there was a transitional phase in which the cremated bones in cinerary urns were interred as secondary or subsequent burials in existing barrows (Keiling 1999, 26), although, in the course of Montelius' Period III, pure urn grave fields, also called flat grave fields, were widely established.[1] Thereby, grave fields emerged, which could be shown to be structured into so-called grave groups.

1 Exceptions are known, for example, from the *Seddiner Kulturgebiet*, the settlement area around the famous site Seddin in Brandenburg, Germany, where burial in barrows continued consistently until the end of Period VI (May/Hauptmann 2012, 105; see also Sopp 1999, 19).

https://doi.org/10.2369/9783869354439.beyond-urnfields

Grave groups[2] are largely described as occupancy structures which often take the form of multiple, dense arrangements of graves, separated from one another by empty areas with no records. Mostly interpreted as the burial places of individual families, clans or settlement communities (cf. Beltz 1906, 33; Tackenberg 1934, 109; Hingst 1976, 80; Willroth 1992, 129; Ettel 2014, 177), some features make other and more complex interpretations possible as well.

Although the actual distribution of grave fields with grave groups is entirely unknown, it can be primarily ascertained for the north of present-day Germany (Fig. 1, nos. 6–16), although they can be found in Denmark as well (Fig. 1, no. 1). For this reason, this form of occupancy is called a northern central European phenomenon (Willroth 1992, 192; Wunderlich 1998, 25; Lütjens 2006, 69), but there are also some examples of burial grounds from other parts of Germany (Fig. 1, nos. 17–18), southern Poland (Fig. 1, no. 2), Switzerland (Fig. 1, no. 3), Austria (Fig. 1, no. 4) and Romania (Fig. 1, no. 5) for which grave groups can be assumed.

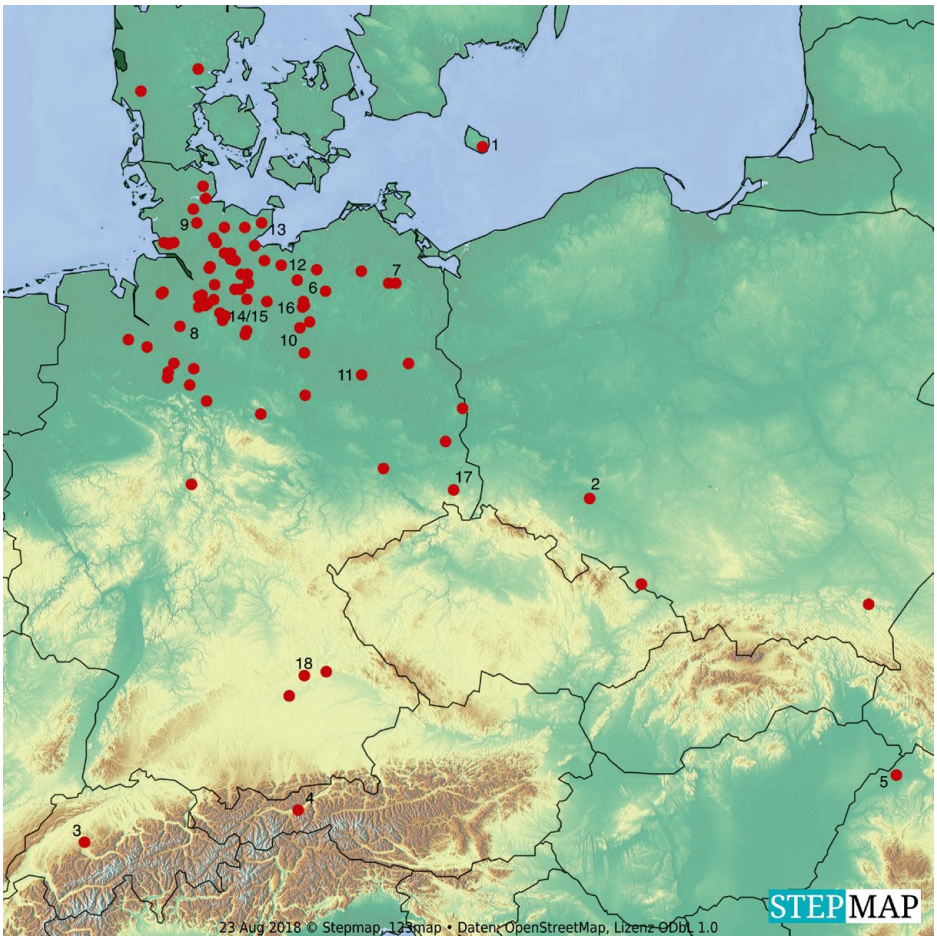


Fig. 1. Grave fields mentioned in the text. Examples outside Germany – 1: Nørre Sandegård, Denmark; 2: Wrocław Żerniki, Poland; 3: Münsingen-Rain, Switzerland; 4: Volders, Austria; 5: Pişcolt, Romania. Examples in Germany – 6: Pinnow, Mecklenburg-Western Pomerania; 7: Cosa, Mecklenburg-Western Pomerania; 8: Unterstedt, Lower Saxony; 9: Jevenstedt, Schleswig-Holstein; 10: Lanz, Brandenburg; 11: Wachow, Brandenburg; 12: Mühlen Eichsen, Mecklenburg-Western Pomerania; 13: Groß Timmendorf, Schleswig-Holstein; 14: Soderstorf, Lower Saxony; 15: Putensen, Lower Saxony; 16: Kolbow, Mecklenburg-Western Pomerania; 17: Niederkaina, Saxony; 18: Riedenburg-Untereggersberg, Bavaria (map W. Domscheit).

2 The term 'grave group' is used synonymously with the terms 'occupancy group', 'grave area', 'grave district', 'cemetery district', or 'grave concentration', etc.

https://doi.org/10.2369/9783869354439.beyond-urnfields

The Late Bronze and Early Iron Age grave field at Pinnow (Lkr. Ludwigslust-Parchim) is a typical example of a burial ground with grave groups in northern Germany. Pinnow and its grave field are located in present-day Mecklenburg-Western Pomerania (Fig. 1, no. 6), close to the city of Schwerin and near Lake Schwerin. Excavated in 2009, 2016 and 2019 by the *Landesamt für Kultur und Denkmalpflege Mecklenburg-Vorpommern*, a total of 184 graves were examined over an area of around 12,200 m² (Burkhardt 2010, 2–4; Mewis 2017, 4–6; Möller 2019, 276–277), even if the exact boundaries of the grave field have not yet been recorded. The grave field spans a time range of roughly 500 to 600 years based on relative chronological analyses, with a beginning during the end of Montelius' Period III and a possible termination of occupancy at the beginning of the Early Iron Age, around 500 BC. This time frame is supported by two armrings as well as a small fragment of a bronze dress pin, which can be dated to Period III due to their ornamental elements (Mewis 2017, 10), and by the types of graves and their construction elements, which mainly reflect traditions of the Late Bronze and Early Iron Ages (Keiling 1969, 22–24; Hofmann 2008, 282–303, 432; Lütjens 2013, 42; Pahlow 2018, 83–84).

A deeper look into the occupancy structure at Pinnow (Fig. 2)[3] reveals that the graves were not arranged in chronological order, but more into individual groups, which are mainly delimited by almost empty spaces with no graves or other features. Taking into account that not all areas of the grave field are clearly recorded and that there is additional disturbance from a cable trench and an erosion gully, at least three grave groups can be identified. While the southwestern (I) and northeastern (III) groups reveal mainly urn graves (*Urnengrab* and *Brandschüttungsgrab*) as well as some pits with cremation remains (unurned; with remains of the pyre; *Brandgrubengrab* and *Brandflächengrab*) and rare pits with cleaned cremation remains (unurned; without remains of the pyre; *Knochenlager*), mostly laid within stone protection (*Steinsetzung/Steinstandspur*) and surrounded by both round and angular stone rings, the northwestern group (II) differs in that stone constructions are rarely represented here, so mainly free-standing urns could be detected.

It is true that the grave constructions are not suitable for a chronological classification of the grave groups, since all variants actually occur at all times. But stone protection tends to decrease in the course of the older Pre-Roman Iron Age (Keiling 1969, 24; Schmidt 1993, 12; Lütjens 2013, 42), which suggests that the northwestern group could reflect a younger section of the grave field. However, the chronological classification of the few and fragmentary metal finds does not necessarily support this idea. But, apart from the different construction of the graves, no further differences between the groups can be identified at Pinnow, neither in the selection of the ceramics, nor in the number or quality of the metal grave goods. This means that, at Pinnow, individuals were buried remarkably close to one another for several centuries, with the result that grave groups were, in turn, separated from one another by almost empty areas. Thus, the grave field at Pinnow joins a large number of burial grounds in northern Germany from the Late Bronze and Early Iron Ages, where occupancy structures reveal so-called grave groups.

3 Here, only the grave field plan from the 2009 excavation is depicted, but this area covers the largest part of the grave field. During the excavations in 2016 and 2019, further areas of the burial ground were recorded that support the previous impressions.

https://doi.org/10.2369/9783869354439.beyond-urnfields

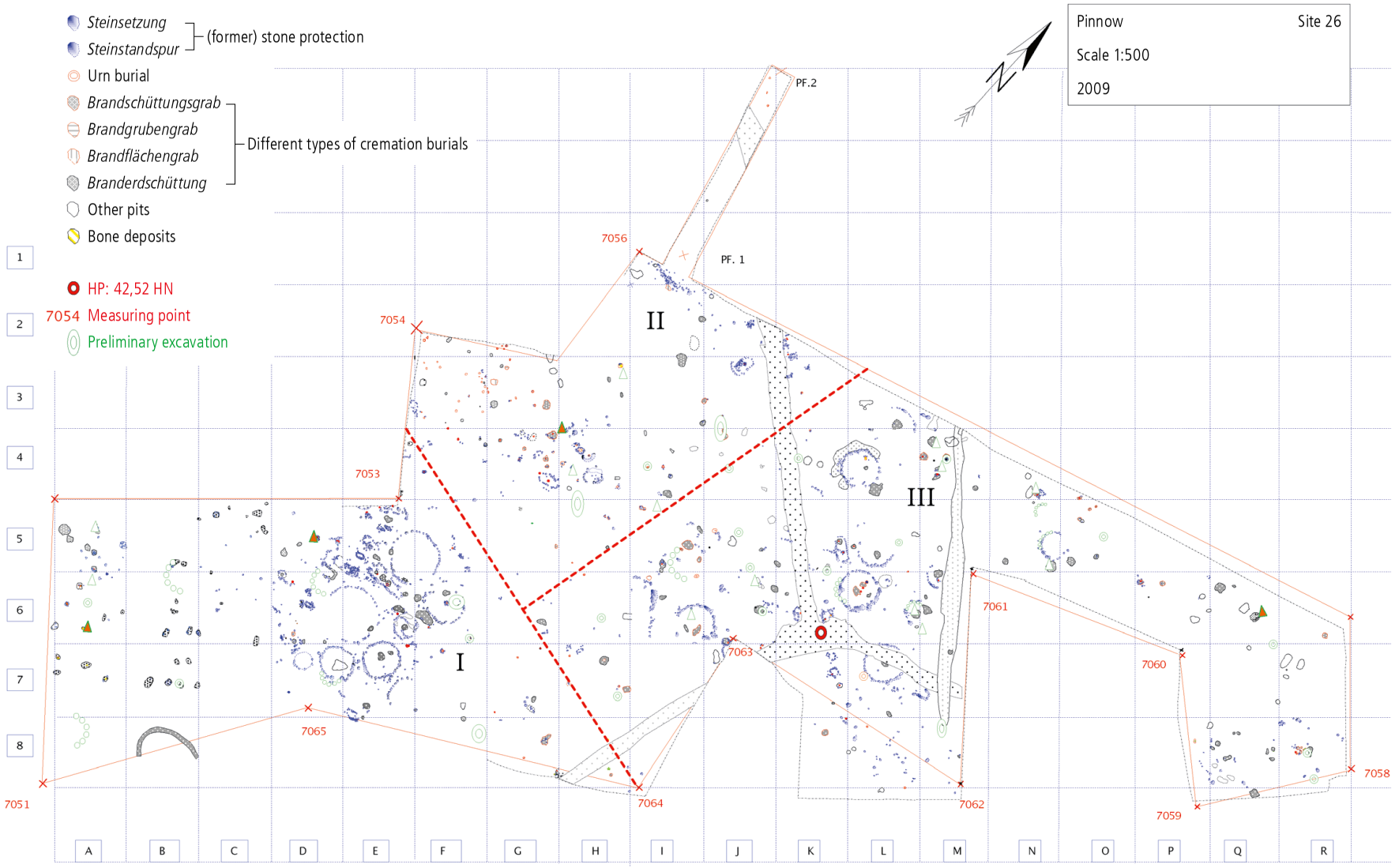


Fig. 2. The grave field with different cremation burial types is divided into a southwestern (I), a northwestern (II) and a northeastern (III) grave group. Stone settings still in situ and traces of stones formerly standing there are marked blue (© Landesamt für Kultur und Denkmalpflege Mecklenburg-Vorpommern, Landesarchäologie, Sigmar Burkhardt).

https://doi.org/10.2369/9783869354439.beyond-urnfields

In the research literature, grave fields with grave groups are already mentioned early and in large numbers. The interpretation that is often presented describes grave groups as burial places used by different families, clans or even settlement communities, who are also thought to have expressed their individual togetherness in a common burial tradition (cf. Beltz 1906, 33; Tackenberg 1934, 109; Hingst 1976, 80; Willroth 1992, 129; Ettel 2014, 177). This would mean that these grave fields show an amalgamation of different families, who carried out burials both separately in groups and yet together in a common grave field. The interpretation is also based on the general observation that, as has also been established for Pinnow, the grave groups of the different grave fields mostly showed only minor differences in the grave construction, the ceramics and the grave goods. In addition, anthropological analyses, when available,[4] show that mostly the same number of men, women and children of all ages are evident for all of the grave groups in the grave fields (Keiling 1962, 4, 38; 1974, 25; Hingst 1976, 80; Fenske 1986, 29).

But there are also burial grounds in which some individual groups show differences to one another or have peculiarities that can be understood as an indication that grave groups cannot be interpreted exclusively in a context of family relationships. This extends to the grave field at Cosa (Lkr. Mecklenburgische Seenplatte, Mecklenburg-Western Pomerania; Fig. 1, no. 7), where the graves in one of the seven groups contain only remains of women and children. In addition, the sometimes very close and densely packed burials in individual groups are also noticeable (Fig. 3; cf. Fenske 1986, 29). Another example is the grave field at Unterstedt (Lkr. Rotenburg [Wümme], Lower Saxony; Fig. 1, no. 8), where several grave groups are of interest, not only because of the empty space between them, but because of their grave goods and their grave constructions. This means that certain metal grave goods, such as razors, and certain stone protections, such as stone pavements, were only found in certain groups, while they were not to be found in other groups from the same time period (Grenz 1965, 91–118 Karte 2). In the case of the grave field at Jevenstedt (Kr. Rendsburg-Eckernförde; Fig. 1, no. 9), Schleswig-Holstein, spatially distinct groups of burials can be, according to H. Hingst, distinguished there in which certain types of vessels are found more frequently than in others. These include the rare painted vessels (Hingst 1976, 80) that are thought to indicate influences from the southern Hallstatt area (Nikulka 2009, 161–162).

A remarkably close and dense occupancy, similar to that recorded at Cosa, can also be observed at several other grave fields, e.g. at Lanz (Lkr. Prignitz, Brandenburg; Fig. 1, no. 10; Keiling 1962, fig. 8.) or Kolbow (Lkr. Ludwigslust-Parchim, Mecklenburg-Western Pomerania; Fig. 1, no. 16; Keiling 1974, fig. 11). Particularly interesting is the grave field at Wachow (Lkr. Havelland, Brandenburg; Fig. 1, no. 11; cf. Fig. 4)[5] where, out of the 303 excavated graves, 93 urns were found in an area of just *c.* 11 m², representing all chronological stages of the Jastorf culture. D.-W. Buck reports that some of the free-standing urns were so close together that during a funeral the neighbouring urns must have been uncovered. Moreover, in some cases the urns have been literally placed inside each other

4 A comprehensive and representative anthropological analysis cannot be presented for the grave field at Pinnow. An anthropological analysis, carried out by W. Blume, is only available for the contents of 16 urns that were recovered from a cable trench already in 1987. There the cremated bones of men and women of all ages could be documented. Only individuals classified as infants are not represented (Blume 1990, 2–6).

5 The grave field at Wachow does not represent a grave field with grave groups at first sight, because only one group has been completely excavated. As D.-W. Buck outlined and other archaeological records around the excavated area prove, the grave field will originally have been larger (Buck 2000, 173).

https://doi.org/10.2369/9783869354439.beyond-urnfields

Fig. 3. The grave field at Cosa (Lkr. Mecklenburgische Seenplatte). Grave group 1 contains only burials of women and children. A very close and dense occupancy of burials in individual groups is noticeable (after Fenske *1986, Beilage).*

https://doi.org/10.2369/9783869354439.beyond-urnfields

https://doi.org/10.2369/9783869354439.beyond-urnfields

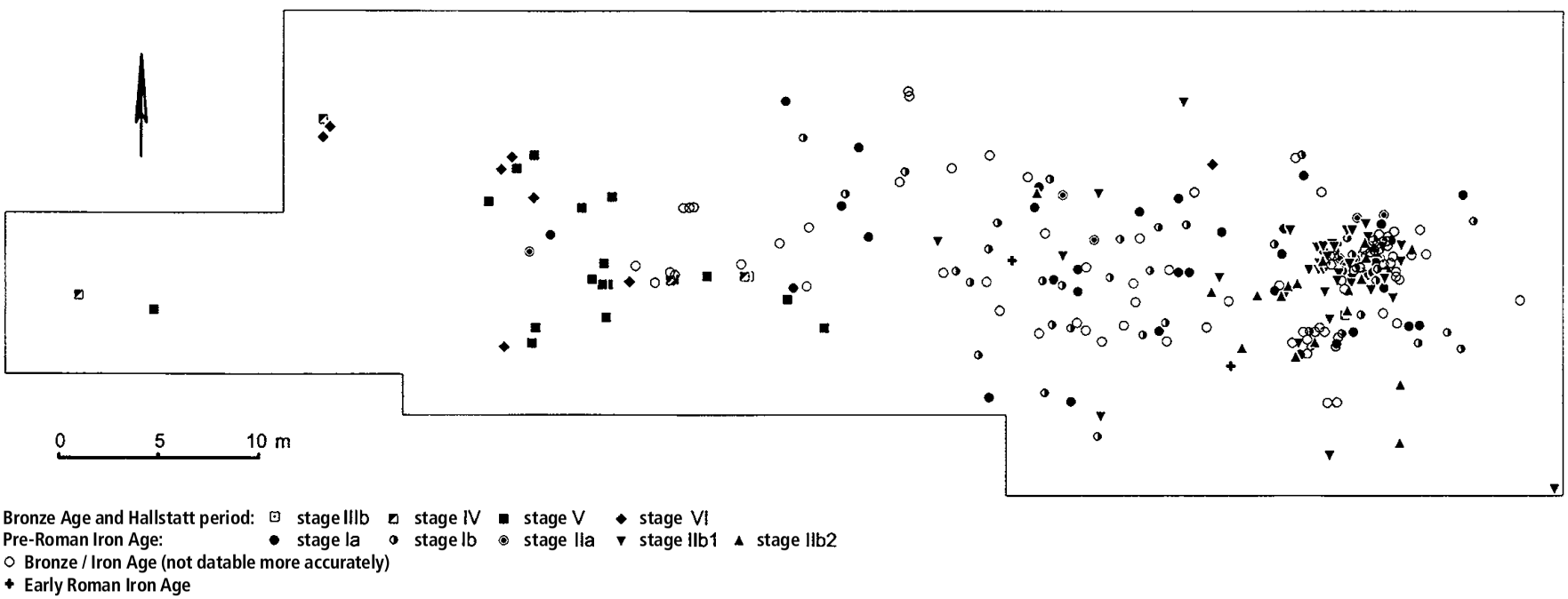

0
5
10 m
Bronze Age and Hallstatt period: stage IIIb stage IV stage V stage VI
Pre-Roman Iron Age: stage Ia stage Ib stage IIa stage IIb1 stage IIb2
Bronze / Iron Age (not datable more accurately)
Early Roman Iron Age

Fig. 4. The grave field at Wachow (Lkr. Havelland). 93 urns were found in an area of c. *11 m². Overlapping and disturbances of older graves by younger ones were not detected (after* Buck *2000, 174 fig. 66).*

(Buck 1976, 144; 2000, 173–174).[6] Thus, the Wachow grave field is a rare exception among the grave fields with grave groups because, in most of the other grave fields, disturbances or even the overlaying of older graves by younger ones were only rarely detected (Keiling 1962, 16; Hingst 1974, 29; Gebers 2018, 30).

This is also true for Pinnow, since such a density of graves as that described for Wachow, and also Cosa, Lanz and Kolbow, could not be documented. However, it is quite noticeable that inside the grave groups some graves are positioned closer together than others. Even more, some of the features can be assumed to be double graves. These are also very close to each other in that they are positioned side by side, but separated by small stone slabs or ceramic sherds (Fig. 5). In addition, in the grave groups with different types of stone rings, graves are to be found both inside and outside of them (cf. Fig. 2). Furthermore, for most of the stone rings – which, it is assumed, may once have been covered by a mound (Burkhardt 2010, 5) –, more than just one grave can be proven, thus showing that the grave groups themselves were also structured within.

The grave fields mentioned above indicate that an interpretation based on family relationships does not by itself go far enough to explain the phenomenon of grave groups and their appearance. In addition, and despite the fact that there is no clear evidence of family relationships, since genetic analyses

Fig. 5. Pinnow (Lkr. Ludwigslust-Parchim), find no. 379/375, an assumed double grave. The urns are separated from each other by a stone slab (© Landesamt für Kultur und Denkmalpflege Mecklenburg-Vorpommern, Landesarchäologie, Sigmar Burkhardt).

6 According to D.-W. Buck, on several occasions older graves were damaged during later burials. He describes one example where the walls of two urns standing close to each other were smashed so that a third one could be placed in the resulting gap (Buck 1976, 144).

https://doi.org/10.2369/9783869354439.beyond-urnfields

on cremated bones are even today not possible, or are extremely difficult (Grosskopf 2004, 36), this raises the question of the meaning of family and clan and whether it is possible to apply present-day viewpoints. We do not know whether Bronze Age and Iron Age families were defined by genetic relationships alone. Accordingly, other determining factors that led to the burial of an individual within a certain grave group are also conceivable.

Furthermore, if we follow the theory that grave groups reflect individual settlements or settlement communities, this should also be evident in the vicinity of the grave fields. Therefore, it can be assumed that, for the region around the Pinnow grave field, several settlements could be found that represented the grave groups. Although there is substantial evidence of settlement activity in the vicinity of the grave field in the form of individual pits, including fireplaces and post pits, as well as corresponding settlement pottery, no house or settlement structures have yet been discovered. Thus, the vicinity of the grave field still reflects just a general impression of the archaeological records of Bronze and Iron Age settlement activity in northern Germany, even though a number of larger settlements have been increasingly excavated and investigated in recent decades, which has significantly improved the state of research, especially in Mecklenburg-Western Pomerania[7] (Brandt/Schmidt 1997, 105; Thieme 2009, 124; Meyer 2010, 12–13; Schmidt 2010, 86–97).

Another perspective

Grave fields with grave groups raise much deeper questions that go far beyond the previous interpretation. This can be demonstrated by the long duration of use in connection with the adherence to the grave field structures in the course of occupancy, but also by the often simultaneous use of the grave groups, whereby the discontinuation of some individual groups and the addition of others can also be proven. Furthermore, the density of occupancy within the grave groups, which can take very different forms, is of importance. These factors enable the formulation of theories and conclusions that can be discussed, e.g. in connection with the Bronze and Iron Age culture of memory.

As already mentioned, the grave field at Pinnow had a duration of use of at least 500 to 600 years, whereas for Lanz and Cosa it was around 400 years (Keiling 1962, 106–8; Fenske 1986, 30). But, for well-known grave fields such as Mühlen Eichsen (Lkr. Nordwestmecklenburg, Mecklenburg-Western Pomerania; Fig. 1, no. 12) or Niederkaina (Lkr. Bautzen, Saxony; Fig. 1, no. 17) which, it is assumed, were also structured into groups, a much longer duration of use between 700 to 900 years has been proven (Ettel 2014, 177–178; Kaiser/Puttkammer 2012, 429). Moreover, the grave groups in the grave fields were used almost simultaneously. The use of individual groups is only occasionally cancelled or new groups are added – such as at Cosa (Fenske 1986, 10–11). The focus here is also on the sometimes very dense occupancy in some groups, which is illustrated in the grave fields at Cosa, Lanz and especially at Wachow – or in the different appearance of some individual graves at Pinnow.

If we summarise these three observations, the question arises of how the occupancy structures could be maintained over such long periods of time and over several generations. How was it possible to put the graves so close together without the younger graves disturbing the older graves, and why are the graves so close together in the first place?

In her paper *Leben mit Erinnerung. Die Performanz von Identität, Status und Prestige in Totenritualen der Bronze- und Eisenzeit Mitteleuropas*, K. Rebay-Salisbury (2012) examines the relationship between primary and secondary burials in burial mounds and what relationships these may have

7 As examples of Bronze and Iron Age settlements in Mecklenburg-Western Pomerania, sites at Zetelvitz and Butzow (Lkr. Vorpommern-Greifswald; Forler/Schmidt 2014a; b) as well as at Glasow (Lkr. Mecklenburgische Seenplatte; Weiss 2014) can be mentioned. All three settlements are published, together with several other sites, in Jantzen et al. 2014.

https://doi.org/10.2369/9783869354439.beyond-urnfields

to one another. Often, family relationships are assumed, but she points out that other explanations are also possible. If, for example, a burial mound testifies to the special prestige of a deceased person, then a burial in its vicinity could be physically linked to it. In this way, social relations could be constructed, and genealogies could be created that are not based on genetic relations alone. As an example, she mentions the middle Bronze Age grave field at Pitten (Bez. Neunkirchen, Austria). Here, burial mound no. 163 took a prominent position in the course of the occupation of the grave field. The first burial in this mound was probably a male cremation burial in an urn; further burials in the same mound include three inhumations, one cremation burial, one cremation pit burial and two urn burials. In the process, according to Rebay-Salisbury, this burial mound was not only used repeatedly during the occupancy period of the grave field, but also became a landmark for other graves, which preferentially clustered around it. She interprets that a place in the immediate vicinity of this important monument was thus particularly prestigious (Rebay-Salisbury 2012, 430–432).

The approach of Rebay-Salisbury is interesting in several respects for the interpretation of grave groups. Based on her description, clear similarities between the grave field at Pitten and the grave field at Pinnow can be recognised, which can then also be applied to all other grave fields mentioned. So, if burial mounds are initially equated with the grave groups – regardless of the fact that these can partly show further subdivisions later on – it can be assumed that these were also founded by a first burial, or 'founder grave'. In the course of the group burial practice further interments were added, all of them in close spatial proximity to the first burial. But, especially for grave fields such as Wachow, Cosa, and Lanz, it is noticeable that grave groups, in contrast to burial mounds, were not actually subject to any spatial limitation, so such a dense occupancy would not have been necessary. There are no stone circles or fence-like structures around the grave groups. Therefore, the groups could have been spatially larger so that each grave had a wider space for itself, but this simply did not happen at Wachow, Cosa, or Lanz. This, in turn, distinguishes the three grave fields from the grave field at Pinnow. As depicted (Fig. 2), except for those burials interpreted as double graves, all graves and stone constructions are spaced a small but distinct distance apart.

However, for grave groups that only include female or male burials or certain grave goods, prestige did not necessarily have to be of importance. Perhaps the status and identity of an individual and that of the respective group can be assumed to have been decisive.[8] But, all of this had to be negotiated and mediated somehow within the burial community and especially across the generations, both for the grave field and for the grave groups, in order to maintain the occupancy structures from the beginning to the end of the grave field use. This required an exchange of information or communication between the generations.

A question of collectivity and communication?

Humans are characterised by the fact that they do not belong to a single social or societal group. K.-P. Hansen, who works on theories in Cultural and Collective Studies, therefore uses the term 'multi-collectivity', which describes the belonging of an individual to several 'collectives' (Hansen 2011, 157–158). A collective, as a burial community such as the one interred at the Pinnow grave field can be understood, is, according to Hansen, a leading term and covers the totality of all conceivable groupings (Hansen 2009a, 27; 2009b, 20). This already includes social groupings, such as family and clans, but also covers groupings such as craftsmen or farmers, or different religious groups. If we fol-

8 On the meaning of 'status' and 'prestige' as categories of social distinction, Robert Schumann has presented a comprehensive publication in which he introduces different aspects of the terms and discusses them on the basis of case studies from the Hallstatt period in southern Germany (Schumann 2015).

https://doi.org/10.2369/9783869354439.beyond-urnfields

low Hansen's approach, we can describe individual burial communities as individual collectives that are reflected in the grave fields.

In addition, collectives can be divided into smaller entities, the so-called sub-collectives, which all have a partial commonality with the collective, but can be highly different in content (Hansen 2011, 174). One kind of division of the burial community is now demonstrated in the grave groups in the burial ground. In other words, the overall place of burial was thus used by individuals who joined together to form a burial community with a common burial tradition: a collective. But, on the basis of the grave groups, we can in turn prove the presence of 'smaller' burial communities, the sub-collectives, in the archaeological record, which reveal differences or deviations in the common burial tradition, be it through the selection of different grave constructions, different grave goods, or even through the burial of only one sex or age group within certain grave groups.

In this regard, as specified by Hansen, so-called standardisations are valid in collectives as well as in the sub-collectives from which they are constituted. Such common standardisations, which deviate from the collective in the sub-collectives, are infinite in number but can be categorised in standardisations of thinking, acting, feeling and also in those of communication. If the first comprise primarily the realities of life, the understanding of feelings, and modes of behaviour within collectives, the latter comprise primarily modes of understanding. However, each category is intertwined, so that one standardisation cannot exist without the other (Hansen 2009b, 20; 2011, 31–110).

When we speak of collectives now, we also speak of collectivity, and this means, as Hansen points out, commonality. Also, collectivity can only be established through information exchange, which means communication (Hansen 2011, 31, 36). Commonality, such as a common burial tradition, is based on mutual exchange, which exists across the boundaries of place and time (ibid., 36.). Information is not only exchanged, whereby spatial distances do not play a major role, but are also stored in, as Jan Assmann called it, 'cultural memory' (Assmann 1988, 9–16). There are several terms and concepts for 'cultural memory' or 'collective memory' in the literature: A. Erll summarises in her publication *Kollektives Gedächtnis und Erinnerungskulturen* that 'the generic term »collective memory« unites all possible manifestations of the relationship between culture and memory (from neuronal networks to »tradition«). Collective memory as a totality of all those processes (organic, medial and social), which are important for the mutual influence of the past and the present in socio-cultural contexts, finds its respective expression in memory cultures' (Erll 2017, 98).[9]

This means that, in collective memory, important information is stored and passed on to future generations. This also means that, through collective memory, the existence of collectives beyond the death of single individuals is secured. But, without communication, no collective memory would form, and information could not be passed on over time and space. Primarily, then, this is about preserving the collective across generational succession or beyond generational memory, which requires information exchange. The question now is: How can we archaeologically capture the mutual influence of the past and the present and the exchange of information respectively? Memory culture lives by communication – verbal as well as non-verbal. Bronze and Iron Age verbal communication in northern Germany is archaeologically invisible. Non-verbal communication, on the other hand, is different, because here symbols and signs[10] are used for communication (Hansen 2011, 35–36). In

9 Translated by the author from the original German text: „Unter dem Oberbegriff »kollektives Gedächtnis« werden alle möglichen Ausprägungen des Verhältnisses von Kultur und Gedächtnis (von neuronalen Netzwerken bis hin zu »Tradition«) vereint. Kollektives Gedächtnis als Gesamtheit all jener Vorgänge (organisch, medial und sozial), denen Bedeutung bei der wechselseitigen Beeinflussung von Vergangenem und Gegenwärtigem in soziokulturellen Kontexten zukommt, findet seine jeweilige Ausprägung in Erinnerungskulturen" (Erll 2017, 98).

10 According to M. Lurker, a wide variety of objects can be called symbols or signs. A symbol can be described as a visible sign of an invisible reality (Lurker 1979, 551–552).

https://doi.org/10.2369/9783869354439.beyond-urnfields

order to guarantee the adherence to the occupation structures of grave fields with grave groups and thus the preservation of the collective over the generational succession, the graves must have been marked accordingly, so that the burial community knew where individual groups were to be found. Examples of different kinds of grave markers, which can be understood as symbols or signs, such as gravestones, stone paving and also mounding, are known from several Bronze and Iron Age grave fields, although their detection is particularly difficult, as they must have been clearly visible above the former surface (Hässler 1976, 20; Hofmann 2008, 293).

At the Soderstorf grave field (Lkr. Lüneburg, Lower Saxony; Fig. 1, no. 14), different forms of grave markers were found. Among them are grave steles and stone circles with the stones still partly standing upright *in situ*, as well as circular stone pavements with a diameter of up to 4 m which, it is assumed, were visible on the former surface (Fig. 6). Therefore, they marked not only single graves but also grave groups (Hässler 1976, 14–20; Thieme 2009, 110, 125 fig. 1). Several grave steles which could also be recovered *in situ* are known from the Pre-Roman Iron Age grave field at Putensen (Lkr. Harburg, Lower Saxony; Fig. 1, no. 15), close to Soderstorf. One of these steles, a granite stone with a height of 0.90 m and a diameter of 0.30 x 0.40 m, is assumed to have marked three graves from the older Pre-Roman Iron Age, which are interpreted as belonging to a family (Wegewitz 1973, 6). Other examples of stone rings and also capstones, which are assumed to have been surface markers, are known from the grave field at Groß Timmendorf (Kr. Ostholstein, Schleswig-Holstein; Fig. 1, no. 13). L. Fischer (2000, 33) acknowledges the fact that disturbances of older graves by younger ones cannot be proved as indirect evidence for the visible designation of the graves. As already mentioned, this could rarely be observed for other grave fields (Keiling 1962, 16; Hingst 1974, 29; Gebers 2018, 30). At least, clear evidence for grave markers is not known from the Pinnow grave field. However,

Fig. 6. Soderstorf: reconstructed stone circles and circular stone pavements, as well as two of the grave steles, which are about one metre high (after Thieme 2009, 125 fig. 1).

https://doi.org/10.2369/9783869354439.beyond-urnfields

the graves with stone rings, which are assumed to have been covered by mounds, could be understood as a form of grave marker with communicative and thus informative value. Such smaller mounds are mentioned, for example, as common for the burial grounds in northeastern Lower Saxony during the Late Bronze and Early Iron Ages, according to M. Pahlow (2018, 84).

What this is largely about is not only the fact that the occupation structures must have been visible above ground, even if they marked just individual graves or they simply have been for orientation. It is more about the question if burial communities also used these structures, or the spatial arrangement of the burial ground, to secure the preservation of the collective and its sub-collectives, for the past but also for the present and future. Occupation structures could be understood as symbols or signs that were used to exert influence on the present or living burial communities. They thus served as a medium of communication between generations and, in the process, signalled and transmitted belonging and delimitation. In relation to Hansen's theories, this in turn enables conclusions about standardisations of thinking, acting and feeling, which were valid in the collective of the superordinate burial community as well as in the associated sub-collective ones. It becomes clear that more complex interpretations of burial groups are possible and at the same time the possibilities of interpretation can be expanded many times over, without the previous interpretation losing its meaning.

In this context, reference should be made to Melanie Augstein's paper *Gräber – Orte der Lebenden und der Toten, Medien der Kommunikation* (Augstein 2013), where she establishes a connection between the occupancy structure and the individual grave. According to her both the spatial arrangement of the grave field and the burial as well as the ordering of the body and objects in the grave can be understood as communicative acts concerning social orders and personal identities. They would equally serve as mnemonic devices through which memory is evoked in such a meaning-laden situation as burial (ibid., 117). However, it should be added that after the funeral, and thus the final closure of the grave, only the above-ground visible elements of the grave construction as well as the spatial arrangement of the grave could be perceived by the burial community over the generations. This again underlines its communicative character and thus also the importance of grave groups.

Furthermore, if we follow K.-P. Hansen's theories again, the grave group, as a phenomenon in itself, can also be discussed as what he calls a 'pan-collective formation'.

As already mentioned, grave fields with grave groups are described as a northern central European phenomenon (Willroth 1992, 192; Wunderlich 1998, 25; Lütjens 2006, 69), whereas other examples suggest a broader distribution (cf. Fig. 1). The grave fields in northern Germany, which are located in a narrower geographic area, already show differences in their burial customs when compared with each other. However, the grave fields that will be mentioned in the following are located at a much wider geographic distance from each other and are accordingly associated with different cultural groups, which also show marked differences in their burial customs. Examples are the site Riedenburg-Untereggersberg (Lkr. Kehlheim, Bavaria; Fig. 1, no. 18) and the exclusively La Tène-period grave field at Pișcolt (Kr. Satu Mare, Romania; Fig. 1, no. 5), in both of which cremations and inhumations are found. These two completely different grave fields (Fig. 7), which are mainly remarkable for their different grave constructions, show, however, parallels to the Pinnow one and thus to several other grave fields in northern Germany, due to their multiple group-wise arrangement of graves, which are separated from one another (Nikulka 1998, 127–139 fig. 33, 175; Zirra 1998, 145–147 fig. 2). For Hansen, pan-collective formations are also means of communication, which are provided on a meta-level via collectivity and which are needed for interaction in and between collectives. Pan-collective formations are completely open in terms of their scope, which means each collective can be involved with its respective individual standardisations. Finally, however, it is always a question of a concrete standardisation, which connects all the collectives with each other (Hansen 2011, 167, 178–181) and which we can potentially record archaeologically in the case of grave groups; that is, all the different burial communities of the grave fields mentioned are possibly

https://doi.org/10.2369/9783869354439.beyond-urnfields

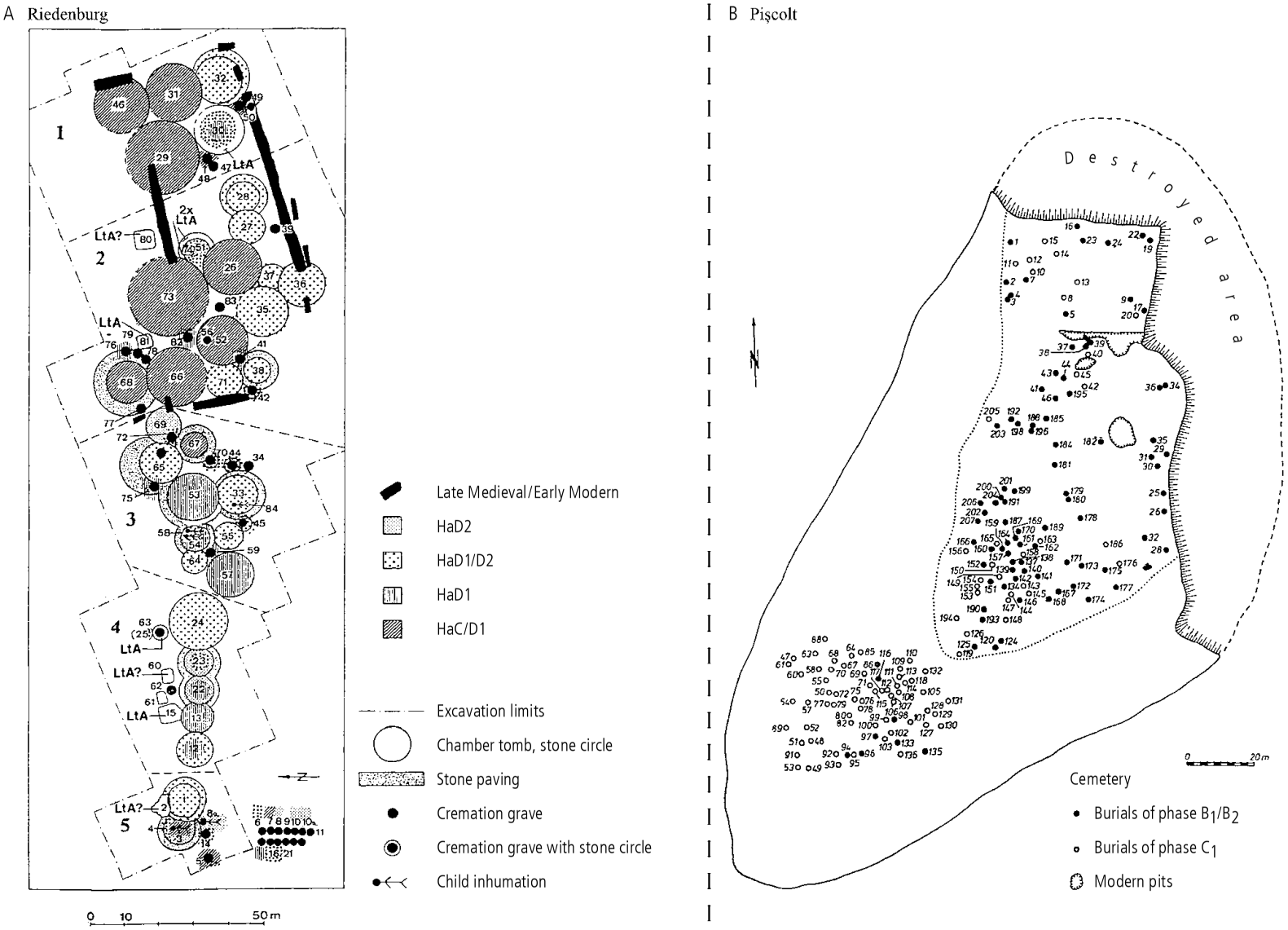


Fig. 7. Plans of the grave fields at Riedenburg-Untereggersberg (Lkr. Kehlheim, Bavaria; A) and Pişcolt (Kr. Satu Mare, Romania; B), illustrating how different grave groups can be perceived due to different burial customs (A: after Nikulka *1998, 138 fig. 33; B: after* Zirra *1998, 147 fig. 2).*

https://doi.org/10.2369/9783869354439.beyond-urnfields

united just through the use of grave groups as a standardised, and thus communicated, form of burial. However, this does not necessarily mean that grave groups everywhere carry the same meaning, but only that maybe the same form or medium for communication was used.

Conclusion

On the basis of the Pinnow grave field and in the comparison with other burial sites, it has become clear in the discussion that the first interpretation alone is not sufficient to explain the phenomenon. This has so far understood grave groups mainly as possible burial sites of individual family, clan or settlement communities, which expressed their individual togetherness in their common burial tradition.

The sometimes long duration of burial ground use was emphasised, which was connected with an adherence to existing structures in the course of occupancy. Mentioned was also the often simultaneous use of the grave groups, although occupancy in individual grave groups could also be discontinued from time to time, or new grave groups were added. Of particular note is the density of occupancy, which in some grave fields could be extremely high within certain grave groups.

With the help of the theories of K. P. Hansen, further possible interpretations have been presented, without excluding the previous one. In this context, burial communities are first considered as collectives that were constituted on the basis of commonalities: their shared burial traditions. Grave groups, as sub-collectives, point to differences or deviations within the burial community, which can be expressed not only through the different grave goods or grave constructions but also in the occupancy structure. The occupancy structures themselves can be understood as symbols or signs that helped to communicate differences or deviations and, at the same time, exert influence on the present or living burial communities. They served as a medium of communication between generations and also signalled and conveyed belonging and delimitation. This in turn gives rise to interpretive possibilities that allow conclusions to be drawn about the realities of life, the understanding of feelings and modes of behaviour of the burial community that are reflected in the archaeological record.

In addition, grave fields with grave groups are mainly found in northern Germany, but there are also examples far outside this geographical area. Although all these grave fields show clear differences in their burial traditions, they nevertheless show similarities in the structural arrangement of their graves. This also suggests that occupancy structures in Bronze and Iron Age grave fields may have had greater social or societal significance, and that the form of burial was not chosen without reason. For further research on grave fields with grave groups, more in-depth studies, supported by scientific analyses, are needed.

Bibliography

Assmann 1988: J. Assmann, Kollektives und Kulturelle Identität. In: J. Assmann/T. Hölscher (eds.), Kultur und Gedächtnis (Frankfurt a. M. 1988) 9–19.

Augstein 2013: M. Augstein, Gräber – Orte der Lebenden und der Toten, Medien der Kommunikation. In: R. Karl/J. Leskovar (eds.), Interpretierte Eisenzeiten. Fallstudien, Methoden, Theorie. Tagungsbeiträge der 5. Linzer Gespräche zur interpretativen Eisenzeitarchäologie. Studien zur Kulturgeschichte von Oberösterreich 35 (Linz 2013) 107–122.

Beltz 1906: R. Beltz, Die Gräberfelder der älteren Eisenzeit in Mecklenburg. Jahrbücher des Vereins für mecklenburgische Geschichte und Altertumskunde 71, 1906, 1–152.

Blume 1990: W. Blume, Anthropologische Leichenbrandbearbeitung, Pinnow 1987, Kr. Schwerin. Unpubl. report, Ortsakte, Landesamt für Kultur und Denkmalpflege Mecklenburg-Vorpommern (Schwerin 1990).

Brandt/Schmidt 1997: J. Brandt/J.-P. Schmidt, Zum Stand der bronzezeitlichen Siedlungsforschung in Mecklenburg-Vorpommern. In: J. J. Assendorp (ed.), Forschungen zur bronzezeitlichen Besiedlung in Nord- und Mitteleuropa. Internationales Symposium vom 9.–11. Mai 1996 in Hitzacker. Internationale Archäologie 38 (Espelkamp 1997) 105–113.

Buck 1976: D.-W. Buck, Das Gräberfeld der Jastorfkultur von Wachow, Kr. Nauen. Ausgrabungen und Funde 21, 1976, 140.

https://doi.org/10.2369/9783869354439.beyond-urnfields

Buck 2000: D.-W. Buck, Das bronze- und eisenzeitliche Gräberfeld bei Wachow. In: Potsdam, Brandenburg und das Havelland. Führer zu archäologischen Denkmälern in Deutschland 37 (Stuttgart 2000) 171–177.

Burkhardt 2010: S. Burkhardt, Archäologische Ausgrabung im Vorfeld des Baus des „Altenhilfezentrums Pinnow". Grabungsbericht: Pinnow, Lkr. Parchim, Fpl. 26. Unpubl. excavation report (Schwerin 2010).

Endrigkeit 2014: A. Endrigkeit, Älter- und Mittelbronzezeitliche Bestattungen zwischen Nordischem Kreis und Süddeutscher Hügelgräberkultur – Gesellschaftsstrukturen und kulturhistorische Beziehungen. Frühe Monumentalität und soziale Differenzierung 6 (Bonn 2014).

Erll 2017: A. Erll, Kollektives Gedächtnis und Erinnerungskulturen. Eine Einführung (Stuttgart ^{3}2017).

Ettel 2014: P. Ettel, Das Gräberfeld von Mühlen Eichsen, Mecklenburg-Vorpommern. Zum Stand der Ausgrabung, Aufarbeitung und Auswertung. In: J. Brandt/B. Rauchfuß (eds.), Das Jastorf-Konzept und die vorrömische Eisenzeit im nördlichen Mitteleuropa. Beiträge der Internationalen Tagung zum einhundertjährigen Jubiläum der Veröffentlichung der „Ältesten Urnenfriedhöfe bei Uelzen und Lüneburg" durch Gustav Schwantes, 18.–22.05.2011 in Bad Bevensen. Veröffentlichung des Helms-Museums, Archäologisches Museum Hamburg, Stadtmuseum Harburg 105 (Hamburg 2014) 169–204.

Fenske 1986: R. Fenske, Cosa. Ein Gräberfeld der vorrömischen Eisenzeit im Kreis Neubrandenburg. Beiträge zur Ur- und Frühgeschichte der Bezirke Rostock, Schwerin und Neubrandenburg 19 (Berlin 1986).

Fischer 2000: L. Fischer, Das Gräberfeld der vorrömischen Eisenzeit von Groß Timmendorf, Kr. Ostholstein. Untersuchungen zu Chronologie, räumlicher Struktur und gesellschaftlichem Wandel. Unpubl. dissertation, Kiel University (Kiel 2000).

Forler/Schmidt 2014a: D. Forler/J.-P. Schmidt, Ein Glücksfall für die Forschung – Bemerkenswert neue Hausbefunde der Bronzezeit aus Zetelvitz, Lkr. Vorpommern-Greifswald. In: Jantzen et al. 2014, 113–116.

Forler/Schmidt 2014b: D. Forler/J.-P. Schmidt, Gruben, Häuser, Bronzeguss – Die jungbronzezeitliche Siedlung bei Butzow, Lkr. Vorpommern-Greifswald. In: Jantzen et al. 2014, 117–122.

Gebers 2018: W. Gebers, Rullstorf IV. Das jungbronzezeitliche Urnengräberfeld der Fundstelle 8. Materialhefte zur Ur- und Frühgeschichte Niedersachsens 52 (Rahden/Westf. 2018).

Grenz 1965: R. Grenz, Die Bestattungen auf dem jungbronzezeitlichen Urnenfriedhof von Unterstedt, Kr. Rotenburg. Hann. Rotenburger Schriften 6 (Rotenburg, Hannover 1965).

Grosskopf 2004: B. Grosskopf, Leichenbrand: Biologisches und kulturhistorisches Quellenmaterial zur Rekonstruktion vor- und frühgeschichtlicher Populationen und ihrer Funeralpraktiken. Unpubl. dissertation, Leipzig University (Leipzig 2004).

Hansen 2009a: K. P. Hansen, Kultur, Kollektiv, Nation. Schriften der Forschungsstelle Grundlagen Kulturwissenschaft 1 (Passau 2009).

Hansen 2009b: K. P. Hansen, Kultur und Kollektiv: Eine essayistische Heuristik für Archäologen. In: D. Krausse/O. Nakoinz (eds.), Kulturraum und Territorialität. Archäologische Theorien, Methoden und Fallbeispiele. Kolloqium des DFG-SPP 1171, Esslingen 17.–18. Januar 2007. Internationale Archäologie 13 (Rahden/Westf. 2009) 17–25.

Hansen 2011: K. P. Hansen, Kultur und Kulturwissenschaften. UTB 1846 (Tübingen, Basel ^{4}2011).

Hässler 1976: H.-J. Hässler, Ein Urnenfriedhof der vorrömischen Eisenzeit bei Soderstorf, Kr. Lüneburg. Grabungsabschnitt 1 – Tafeln und Karten. Die Urnenfriedhöfe in Niedersachsen 12 (Hildesheim 1976).

Hingst 1974: H. Hingst, Jevenstedt. Ein Urnenfriedhof der älteren vorrömischen Eisenzeit im Kreise Rendsburg-Eckernförde, Holstein. Urnenfriedhöfe Schleswig-Holsteins 4 = Offa-Bücher 27 (Neumünster 1974).

Hingst 1976: H. Hingst, Grabhügelfelder der jüngeren Bronze- und der frühen Eisenzeit aus Schleswig-Holstein. Offa-Bücher 33 (Neumünster 1976).

Hofmann 2008: K. P. Hofmann, Der rituelle Umgang mit dem Tod. Untersuchungen zu bronze- und früheisenzeitlichen Brandbestattungen im Elbe-Weser-Dreieck – Teil 1. Archäologische Berichte des Landkreises Rotenburg (Wümme) 14 (Oldenburg, Stade 2008).

Holste 1953: F. Holste, Bronzezeit in Süd- und Westdeutschland. Handbuch der Urgeschichte Deutschlands 1 (Berlin 1953).

Jantzen et al. 2014: D. Jantzen/L. Saalow/J.-P. Schmidt (eds.), Pipeline: Archäologie. Ausgrabungen auf den großen Ferngastrassen in Mecklenburg-Vorpommern (Schwerin 2014).

Kaiser/Puttkammer 2012: J. Kaiser/Th. Puttkammer, Das prähistorische Gräberfeld auf dem Schafberg von Niederkaina bei Bautzen. In: D. Bérenger/J. Bourgeois/M. Talon (eds.), Gräberlandschaften der Bronzezeit. Internationales Kolloquium zur Bronzezeit, Herne, 15.–18. Oktober 2008. Paysages funeraires de l'age du Bronze, Colloque International sur l'age du Bronze, Herne, 15.–18. octobre. Bodenaltertümer Westfalens 51 (Darmstadt 2012) 429–448.

Keiling 1962: H. Keiling, Ein Bestattungsplatz der jüngeren Bronze- und vorrömischen Eisenzeit von Lanz, Kr. Ludwigslust. Jahrbuch Bodendenkmalpflege in Mecklenburg 1962, 5–440.

Keiling 1969: H. Keiling, Die vorrömische Eisenzeit im Elde-Karthane-Gebiet (Kreis Perleberg und Kreis Ludwigslust). Beiträge zur Ur- und Frühgeschichte der Bezirke Rostock, Schwerin und Neubrandenburg 3 (Berlin 1969).

Keiling 1974: H. Keiling, Kolbow. Ein Urnenfriedhof der vorrömischen Eisenzeit im Kreis Ludwigslust. Beiträge zur Ur- und Frühgeschichte der Bezirke Rostock, Schwerin und Neubrandenburg 8 (Berlin 1974).

Keiling 1999: H. Keiling, Die Bronzezeit – ein goldenes Zeitalter? Eine Einführung in die Bronzezeit Norddeutschlands. In: W. Budesheim/H. Keiling (eds.), Zur Bronzezeit in Norddeutschland. Beiträge für Wissenschaft und Kultur 3 (Neumünster 1999) 11–38.

Lütjens 2006: I. Lütjens, Bannkreise aus Stein? – Das Gräberfeld von Groß Siemz, Lkr. Nordwestmecklenburg. In: F. Lüth/J.-P. Schmidt (eds.), Die Autobahn A20 –

https://doi.org/10.2369/9783869354439.beyond-urnfields

Norddeutschlands längste Ausgrabung. Archäologische Forschungen auf der Trasse zwischen Lübeck und Stettin. Archäologie in Mecklenburg-Vorpommern 4 (Schwerin 2006) 65–70.

Lütjens 2013: I. Lütjens, Frühe Häuser und viele Gräber bei Todesfelde, Kr. Segeberg. Archäologische Nachrichten aus Schleswig-Holstein 19, 2013, 39–43.

Lurker 1979: M. Lurker, Symbol. In: M. Lurker (ed.), Wörterbuch der Symbolik. Kröners Taschenausgabe 464 (Stuttgart 1979) 551–553.

May/Hauptmann 2012: J. May/T. Hauptmann, Das „Königsgrab" von Seddin und sein engeres Umfeld im Spiegel neuerer Feldforschungen. In: D. Bérenger/J. Bourgeois/M. Talon (eds.), Gräberlandschaften der Bronzezeit. Internationales Kolloquium zur Bronzezeit, Herne, 15.–18. Oktober 2008. Paysages funeraires de l'age du Bronze, Colloque International sur l'age du Bronze, Herne, 15.–18. Octobre. Bodenaltertümer Westfalens 51 (Darmstadt 2012) 105–132.

Mewis 2017: F. Mewis, Bergung und Dokumentation von Teilen des Bodendenkmals Pinnow, Lkr. Ludwigslust-Parchim, Fpl. 26, im Rahmen des Projektes Archäologische Untersuchungen im Bereich des Altenpflegezentrums Pinnow. 2. BA [Bauabschnitt]. Unpubl. excavation report (Schwerin 2017).

Meyer 2010: M. Meyer, Siedlungen der vorrömsichen Eisenzeit im nördlichen Mitteleuropa. Einführende Bemerkungen. In: M. Meyer (ed.), Haus – Gehöft – Weiler – Dorf. Internationale Tagung an der Freien Universität Berlin vom 20.–22. März 2009. Berliner Archäologische Forschungen 8 (Berlin 2010) 11–15.

Möller 2019: F. Möller, Bronzezeit. Pinnow, Lkr. Ludwigslust-Parchim. Kurze Fundberichte 2019. Jahrbuch Bodendenkmalpflege in Mecklenburg-Vorpommern 67, 2019 [2021], 276–277.

Nikulka 1998: F. Nikulka, Das hallstatt- und frühlatènezeitliche Gräberfeld von Riedenburg-Untereggersberg, Lkr. Kelheim, Niederbayern. Archäologie am Main-Donau-Kanal 13 (Rahden/ Westf. 1998).

Nikulka 2009: F. Nikulka, Keltische Einflüsse im Norden. In: Naturhistorische Gesellschaft Nürnberg e.V. (ed.), Beiträge zur Vorgeschichte Nordostbayerns 7 = Beiträge zur Hallstatt- und Latènezeit in Nordostbayern und Thüringen. Tagung vom 26.–28. Oktober 2007 in Nürnberg (Nürnberg 2009) 159–177.

Pahlow 2018: M. Pahlow, Nordostniedersachsen während der jüngeren Bronze- bis älteren Eisenzeit. Materialhefte zur Ur- und Frühgeschichte Niedersachsens 54 (Rahden/ Westf. 2018).

Rebay-Salisbury 2012: K. Rebay-Salisbury, Leben mit Erinnerung. Die Performanz von Identität, Status und Prestige in Totenritualen der Bronze- und Eisenzeit Mitteleuropas. In: B. Christiansen/U. Thaler (eds.), Ansehenssache. Formen von Prestige in Kulturen des Altertums. Münchner Studien zur Alten Welt 9 (München 2012) 427–449.

Schmidt 1993: J.-P. Schmidt, Studien zur jüngeren Bronzezeit in Schleswig-Holstein und dem nordelbischen Hamburg. Universitätsforschungen zur Prähistorischen Archäologie 15 (Bonn 1993).

Schmidt 2010: J.-P. Schmidt, Neue Erkenntnisse zu bronzezeitlichen Siedlungen in Nordostdeutschland. In: M. Meyer (ed.), Haus – Gehöft – Weiler – Dorf. Siedlungen der Vorrömischen Eisenzeit im nördlichen Mitteleuropa. Internationale Tagung an der Freien Univerisät Berlin vom 20.–22. März 2009. Berliner Archäologische Forschungen 8 (Rahden/Westf. 2010) 85–99.

Schumann 2015: R. Schumann, Status und Prestige in der Hallstattkultur. Aspekte sozialer Distinktion in ältereisenzeitlichen Regionalgruppen zwischen Altmühl und Save. Münchner Archäologische Forschungen 3 (Rahden/ Westf. 2015).

Sopp 1999: M. Sopp, Die Wiederaufnahme älterer Bestattungsplätze in den nachfolgenden vor- und frühgeschichtlichen Perioden in Norddeutschland. Antiquitas 39 (Bonn 1999).

Struve 1971: K. W. Struve, Die Bronzezeit, Periode I–III. In: O. Klose (ed.), Geschichte Schleswig-Holsteins 2 (Neumünster 1971) 1–96.

Tackenberg 1934: K. Tackenberg, Die Kultur der frühen Eisenzeit (750 vor Christi Geburt bis Christi Geburt) in Mittel- und Westhannover. Die Urnenfriedhöfe in Niedersachsen 1,3/4 (Hildesheim, Leipzig 1934).

Thieme 2009: W. Thieme, Studien zur älteren vorrömischen Eisenzeit in der nördlichen Lüneburger Heide, ausgehend vom Gräberfeld Soderstorf, Landkreis Lüneburg. In: W. Budesheim/H. Keiling (eds.), Die Jastorf-Kultur. Forschungsstand und kulturhistorische Probleme der vorrömischen Eisenzeit. Beiträge für Wissenschaft und Kultur 9 (Wentorf bei Hamburg 2009) 108–152.

Wegewitz 1973: W. Wegewitz, Der Urnenfriedhof der älteren und jüngeren vorrömischen Eisenzeit von Putensen, Kreis Harburg. Die Urnenfriedhöfe in Niedersachsen 11 (Hildesheim 1976).

Weiss 2014: U. Weiss, So baute man in der Eisenzeit – Die Häuser von Glasow, Lkr. Mecklenburgische Seenplatte. In: Jantzen et al. 2014, 161–164.

Willroth 1992: K.-H. Willroth, Untersuchungen zur Besiedlungsgeschichte der Landschaften Angeln und Schwansen von der älteren Bronzezeit bis zum frühen Mittelalter. Siedlungsarchäologische Untersuchungen in Angeln und Schwansen 1 = Offa-Bücher 72 (Neumünster 1992).

Wunderlich 1998: I. Wunderlich, Studien zum Verhältnis von Bestattungswesen und Siedelwesen der vorrömischen Eisenzeit und der älteren Römischen Kaiserzeit an der Niederelbe. Unpubl. dissertation, Munich University (München 1998).

Zirra 1998: V. V. Zirra, Die relative Chronologie des Gräberfeldes von Pisçolt (Kr. Satu Mare, Rumänien). In: F. Müller (ed.), Münsingen-Rain, ein Markstein der keltischen Archäologie. Funde, Befunde und Methoden im Vergleich. Akten des Internationalen Kolloquiums „Das keltische Gräberfeld von Münsingen-Rain 1906–1996", 1996. Schriften des Bernischen Historischen Museums 2 (Bern 1998) 145–160.

https://doi.org/10.2369/9783869354439.beyond-urnfields

Wenke Domscheit
(Universität Hamburg)
Römisch-Germanische-Kommission des Deutschen Archäologischen Instituts
Frankfurt a. Main
Germany
wenke.domscheit@dainst.de

https://doi.org/10.2369/9783869354439.beyond-urnfields

A tale of ancient mounds …
The re-use of old monuments for Iron Age burials in northern Germany

Robert Schumann

Keywords: Pre-Roman Iron Age, northern Germany, burial mounds, megalith, cultural memory, the past in the past

Abstract: Ancient monuments have always sparked the interest of people, not only at the time of their construction and primary use or since the establishment of scientific archaeology. Monuments visible on the surface have at all times, as parts of the cultural landscape, provoked a reaction from later communities. In this process, they can have been charged with memories and given new meanings. Therefore, these monuments are not only relics of a factual or fictional past but are also integral parts of the present. The interaction with older monuments can be proven archaeologically in many cases for the Pre-Roman Iron Age. Megalithic monuments from the Neolithic and (Late) Neolithic/Bronze Age burial mounds in particular were often used as nuclei for the foundation of new burial grounds. In addition, numerous other re-uses of Neolithic and Bronze Age relics can be observed, which show that the distant past was of great importance for Iron Age communities. This paper explores the different uses of ancient monuments in the Iron Age and their possible interpretations.

Introduction

Burials form one of the most important archaeological bases for research into the Pre-Roman Iron Age in northern Germany, as they have been extensively examined since the beginning of archaeology. In contrast, our knowledge of settlement structures remains deficient (see Nikulka 2019 for a comprehensive overview). At the same time, the relatively uniform burial rites with few grave goods and cremations limit far-reaching conclusions, although clear regional differences can be identified (Bräunig 2014; see various contributions, this volume). For this reason, it is necessary to consider all the elements of the burial practices to draw a comprehensive picture in the (re)construction of Early Iron Age communities. This also includes the phenomenon that Pre-Roman Iron Age burial grounds were often constructed near old burial monuments (see Sopp 1999; Schumann 2022). This practice has long been known in archaeology and was addressed by early research primarily with regard to chronological questions (Jacob-Friesen 1959, 4). At the same time, this offers us the chance to reflect on the appropriation of the past, memory and identity formation of the respective communities, and is thus crucial for the overall understanding of Iron Age burial practices and communities.

The North German Plain is particularly characterised by numerous Neolithic (*c.* 4000–1800 BCE) and Bronze Age (*c.* 1800–600 BCE) monuments with regard to the existing cultural landscape in the

https://doi.org/10.2369/9783869354439.beyond-urnfields

Iron Age. Megalithic sites and burial mounds, as visible monuments on the surface, are manifestations of past former habitation in many regions. Accordingly, the question of the extent to which these (funerary) monuments of past times attracted the attention of Iron Age communities and how they were integrated into their cultural landscape and ideas is an exciting research question. Therefore, the reference to the distant past in the Pre-Roman Iron Age will be highlighted in the following sections, and its epistemological potential will be explored.

The re-use of old burial sites and monuments during the Pre-Roman Iron Age-

On first review, it is apparent that burial mounds and megalithic sites were frequently re-used in the Pre-Roman Iron Age, as they are often mentioned in publications regarding Iron Age urnfields. Matthias Sopp clearly demonstrates the phenomenon of the re-use of long-abandoned burial sites in his study. He lists a total of 134 burial sites in northern Germany that were re-used as burial grounds in the Pre-Roman Iron Age (Sopp 1999, 77 with map 3). Both continuously used sites and sites that were revisited after a longer hiatus can be identified. Horst Keiling, for example, lists 91 re-used sites in northeastern Germany, whereby he considers a continuity to be very probable for 40 of them (Keiling 2009, 24 fig. 13; 38–40). The diversity in regional distribution is shown clearly by some values: Horst Keiling, for example, in his 1969 work on the Pre-Roman Iron Age in the Elde-Karthane area, was unable to show any definite re-use of burial sites of older date among the 123 burial sites there (Keiling 1969, 23), even though some burial sites may not have been used continuously from the Bronze Age to the Iron Age (Keiling 2009, 24 fig. 13). In any case, the percentage of re-visited burial sites would be in the low single digits. In contrast, the situation is completely different in some more western regions. Especially in the Stader Geest area, Iron Age burial sites seem to have been preferentially located in the vicinity of older burial sites (Hässler 1976/1977, 32). For the district of Rotenburg (Wümme), Ingo Eichfeld even mentions the extraordinarily high percentage of 60 % of Iron Age burial sites that were laid out on top of older cemeteries whereby, overall, only very few continuities from the late Bronze Age to the Iron Age can be detected (Eichfeld 2005, 66–68). Most recently, I was able to observe 117 burial sites in northern Germany which, according to current knowledge, were revisited in the Pre-Roman Iron Age after a hiatus in use (Schumann 2021). The numbers presented show that, although the phenomenon is known throughout northern Germany, there are striking differences in the frequency of re-use (Fig. 1). Accordingly, with regard to burial customs, the Pre-Roman Iron Age also breaks down into different regional characteristics, which are not, however, identical to the regional groups that are determined on the basis of other burial system characteristics (Bräunig 2014; Nikulka 2014). In any case, for most of northern Germany older monuments regularly form the basis for a construction of Iron Age burial grounds.

The re-use of old burial sites in the Pre-Roman Iron Age in northern Germany is, despite regional differences, thus a regularly observed phenomenon and therefore an important aspect of Iron Age burial practices. Hence, a further characterisation and interpretation is important for the overall understanding of these practices within this region. One problem hereby is that regularities and more specific statements are difficult to determine due to the specific nature of the sources, as many urnfields have already been excavated several decades ago. Nevertheless, some aspects will be elaborated in the following.

Thus, in addition to the frequency, the question arises as to the type of secondary use. In the Pre-Roman Iron Age, urn burials were deposited in old funerary monuments as well as at or near to older burial mounds (Sopp 1999). Kerstin Hofmann distinguishes between two phenomena with regard to the re-use of burial mounds – those in which only secondary burials were inserted without further

https://doi.org/10.2369/9783869354439.beyond-urnfields

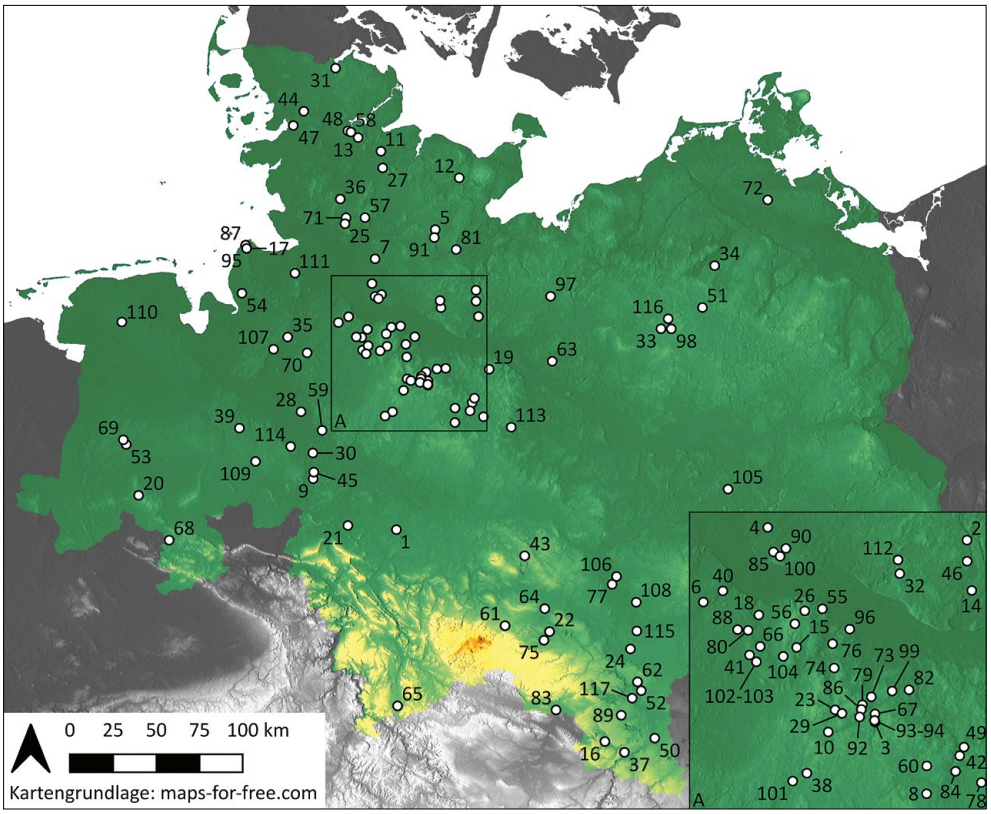


Fig. 1. Ancient burial grounds re-used in the Pre-Roman Iron Age (after Schumann *2021; map L. Eckert, based on a map by maps-for-free.com).*

modification to the older monument and those in which larger modifications to the mound took place, such as the addition of a mound phase (Hofmann 2008, 279–280).

Likewise, it must be considered whether old burial mounds were the starting point for the foundation of larger urnfields in which entire burial communities were interred, or whether it is more a matter of small groups of burials. Due to the respective state of research and the preservation conditions for urn graves, this cannot be answered in every case, but here, too, a diversity can be observed.

At numerous old burial monuments – according to the current state of research – no large urnfields seem to have been created, but only a few burials were added. A striking example of this is the so-called three-period mound near Melzingen, Lkr. (German: *Landkreis* = district, county) Uelzen (Asmus 1948; Jacob-Friesen 1959, 4). In a Neolithic burial mound necropolis, one mound was extended in the Bronze Age and ultimately a single Pre-Roman Iron Age urn burial was deposited in the barrow (Fig. 2). This is the only Iron Age burial of this period from a site in which, overall, five mounds were excavated. Even if it cannot be ruled out that flat graves are to be found in the area between the mounds, this is an example of a separated single urn burial in an older mound. Certainly one of the most remarkable sites in northern Germany in connection with this subject is Twietfort, Lkr. Ludwigslust-Parchim (formerly Kr. [German: *Kreis* = district] Lübz; Rennebach 1974), where two secondary burials dating to the Iron Age were found in a megalithic grave, where they had been placed together in a stone shelter (Fig. 3). Urn 2 in particular stands out because of its extensive grave goods, which show strong references to Scandinavia and make it possible to date the grave unquestionably to phase Keiling Ic (*c.* 4th to early 3rd century BCE). Günter Rennebach assumes that the individuals from grave 2, who were represented by rich grave goods, were also distinguished by the choice of burial site, thus underlining their outstanding social position (Rennebach 1974, 190).

https://doi.org/10.2369/9783869354439.beyond-urnfields

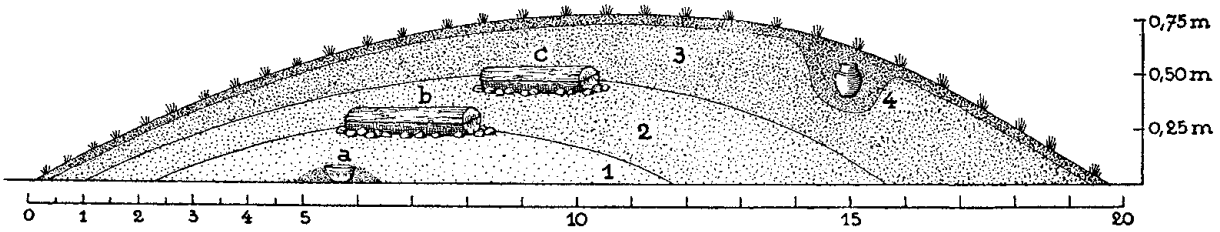


Fig. 2. The multi-period mound of Melzingen, Lkr. Uelzen. 1: Mound covering a Neolithic cremation burial (a); 2: Mound enlargement for a Bronze Age treetrunk coffin (b); 3: Mound enlargement for a second Bronze Age treetrunk coffin (c); 4: Iron Age cremation burial in urn, with iron dress pin (after Jacob-Friesen 1959, 3 fig. 1).

In many cases, however, the question of the extent of Iron Age re-use in terms of the number of burials cannot be clearly determined. For instance, in the Bronze Age barrow cemetery at Wittenwater, Lkr. Uelzen, some Early Iron Age urn and cremation burials are known that could represent a somewhat larger group of corresponding separate burials. Nevertheless, Franziska Hage emphasises that this burial group was probably originally much larger, but at the same time significantly smaller than the usual cemetery with several hundred burials (Hage 2012, 158–160).

A case quite different from the small grave groups and individual burials discussed so far is when not only individual burials are placed in/around ancient monuments, but entire urnfields. This is illustrated, for example, in Zislow, Lkr. Mecklenburgische Seenplatte, where monument conservation excavations led to the discovery of numerous sites and thus to a relatively profound insight into prehistoric habitation patterns (Schoknecht 1991). In addition to the Bronze Age megalithic sites and burial mounds, there is also an extensive Pre-Roman Iron Age urnfield, which was partly excavated (Keiling 1991). The urnfield is located directly next to a Neolithic dolmen and other burial mounds. In addition, secondary burials were found in Bronze Age tumuli. Even more obvious is the geographical relationship of a large urnfield to an older burial mound in Ehestorf-Vahrendorf, Lkr. Harburg (Wegewitz 1962), where in the 1950s Willi Wegewitz was able to excavate a Pre-Roman and Early Roman Iron Age urnfield with about 1,000 preserved burials adjacent to a large Bronze Age burial mound (Fig. 4). Significantly, only one secondary Iron Age, or more precisely Jastorf b phase (*c.* 4th century BCE), burial was found in the tumulus, while the other Iron Age burials seem to respect the mound. The urnfield was established in the Jastorf phase, to which only a few burials of the cemetery can be assigned. Looking at the mapping of the different phases, however, it becomes clear that the Pre-Roman Iron Age burials, including those of the Ripdorf phase (Wegewitz 1962, 28–29 with figs. 7–8), are more clearly oriented towards the burial mound than the Roman Iron Age burials, which also appear more frequently in the eastern part of the excavation area, where no Pre-Roman Iron Age burials were discernible.

The re-use of old funerary monuments as burial sites in the Pre-Roman Iron Age can thus be demonstrated in a broad spectrum, from individual burials to the construction of entire urnfields at these sites; furthermore, different treatment of the old monuments can be observed. The practice of placing only a few burials and not entire burial communities in corresponding structures was probably the norm in the Pre-Roman Iron Age (Hofmann 2008, 280), although the state of research does not generally enable us to exclude with certainty whether even more burials, and thus a large urnfield, were placed in or around the older burial mounds (for more details see Schumann 2021). Also decisive for the interpretation of the phenomenon are the sites that were re-used. While the phenomenon can be demonstrated for Neolithic megalithic sites as well as for Bronze Age burial mounds, the latter were obviously revisited much more frequently. Matthias Sopp, for example, was able to identify only 23 re-uses of megalithic sites in the Pre-Roman Iron Age, compared to over 100 of Bronze Age sites (Sopp 1999, 77). Cornelius Holtorf lists twelve subsequent uses of megalithic sites in the Pre-Roman Iron Age for Mecklenburg-

https://doi.org/10.2369/9783869354439.beyond-urnfields

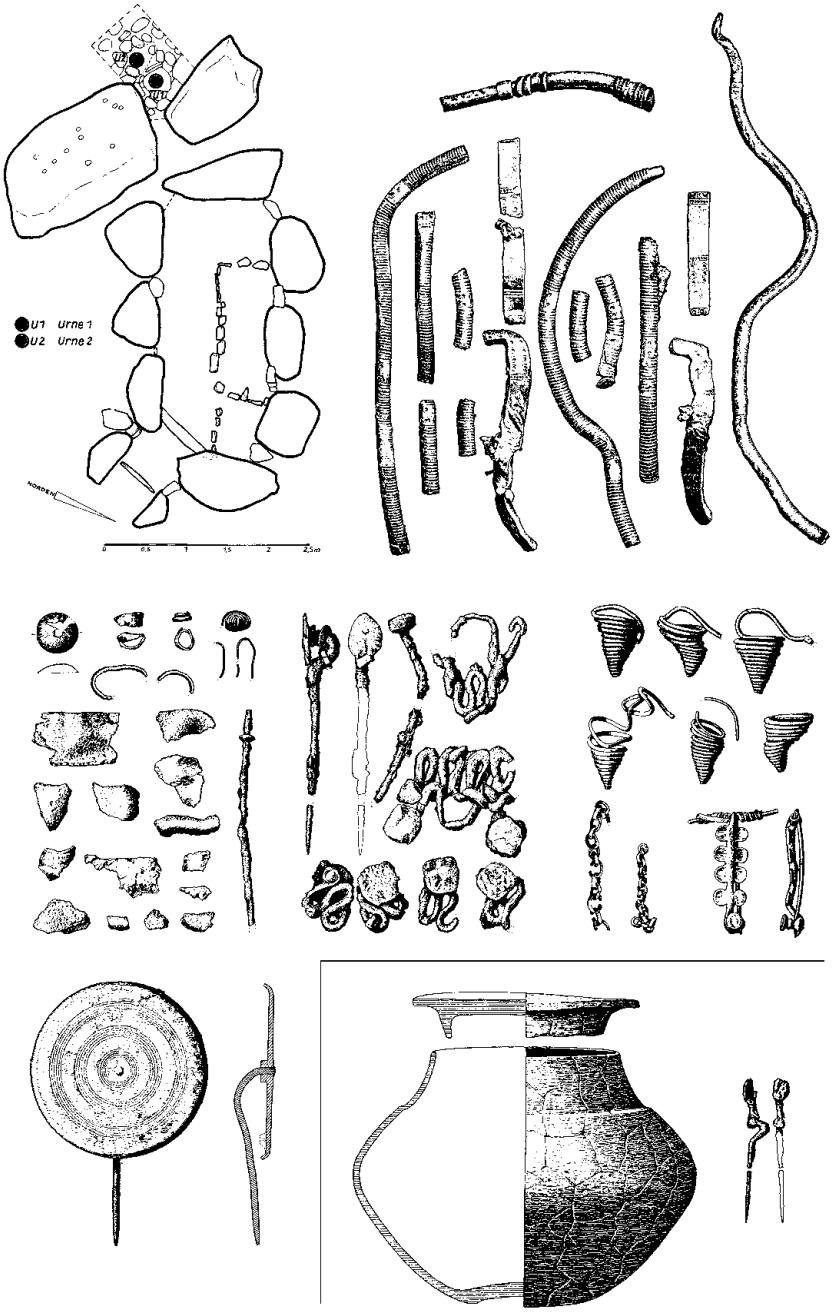


Fig. 3. Situation and inventories of Iron Age burials (Urn 1 and Urn 2) at the megalithic site of Twietfort, Lkr. Ludwigslust-Parchim (after Rennebach *1974, 174 fig. 1, 176 fig. 2, 179 fig. 4, 181 fig. 5, 183 fig. 6, 185 fig. 7, 187 fig. 8).*

Western Pomerania (Holtorf 1998). Accordingly, Bronze Age burial mounds are visited much more frequently than Neolithic monuments, a circumstance that is of great importance for interpretation. The question, however, is whether in the Pre-Roman Iron Age the difference between megalithic monuments (overview in Müller 2017) and other burial mounds was something that could be seen on the surface at all. Therefore, it remains uncertain whether different types of monuments were also being associated with different perceptions of time and memory. The clear preference for Bronze Age sites could indicate on the one hand that the monuments were perceived differently or, on the other hand, that distinct traditions and memories were associated with the different monuments.

https://doi.org/10.2369/9783869354439.beyond-urnfields

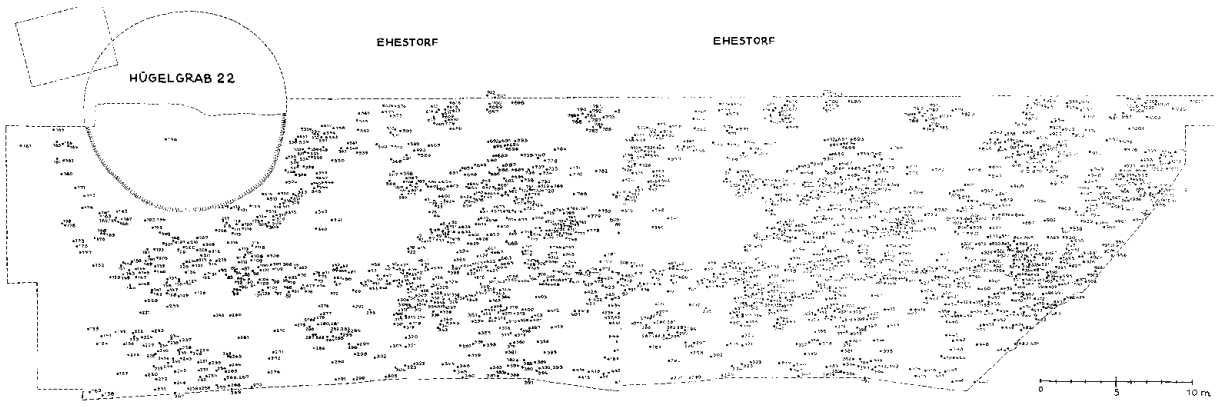


Fig. 4. The Pre-Roman and Roman Iron Age urnfield at Ehestorf-Vahrendorf, Lkr. Harburg, alongside an ancient mound: Hügelgrab 22 *(after* Wegewitz *1962, 16 fig. 4).*

Sometimes, natural terrain formations seem to have been mistaken for ancient monuments, which were then integrated into the Iron Age funerary landscape. In addition, more inconspicuous elements of the cultural landscape were also selected as burial sites. Gustav Schwantes already emphasised that the cemetery of Jastorf, Lkr. Uelzen, is located in an area of field systems that he considered to be older than the urnfield on the basis of a few vague stratigraphic observations. From this, he concluded that even in this inconspicuous case the 'custom of the older Iron Age [was] followed of placing the burial vessels in natural or artificial elevations (otherwise mostly burial mounds)'[1] (Schwantes 1911, 98). Accordingly, many geographical references to artificial elevations need to be considered, and thus not only burial sites but also sites of other human activity were re-used. Heinrich Krüger expands the specifications of re-use accordingly to the effect that 'man-made elevations were sometimes chosen as burial sites'[2] (Krüger 1961, 15). This is also evident in older burials close to the urnfields, which are not regarded as typical above-ground monuments. In Soderstorf, Lkr. Harburg, for example, a Neolithic burial, described as a flat grave, was found in a stone cist in the area of the urnfield. Hässler assumes that parts of this stone cist were also removed during the period of use in the Pre-Roman Iron Age (Hässler 1972, 173). Even if this is not a feature that can classically be described as above-ground, it needs to be discussed here whether there is an intentional reference to the Neolithic burial ground, as its stones were probably visible above ground. Otherwise, the stones would probably not have been removed during the use of the area in the Iron Age. Thus, this burial chamber was probably perceived as man-made and as (part of) a burial ground. Accordingly, the re-use of mounds and megaliths in the Pre-Roman Iron Age discussed here may represent only the archaeologically detectable tip of the iceberg.

It is also worth mentioning that there are many Pre-Roman Iron Age burial sites that were not created directly at ancient monuments but may be evidence of a landscape reference to these nevertheless. An examination of the surroundings of megalithic sites and Bronze Age burial mounds shows that Pre-Roman Iron Age urnfields were often also established in their immediate and wider surroundings. For example, Cornelius Holtorf mentions urnfields within a radius of up to 500 m for eleven megalithic sites in Mecklenburg-Western Pomerania (Holtorf 1998). An interesting site in this respect is Stuer, Lkr. Mecklenburgische Seenplatte, where the remnants of a Pre-Roman Iron

1 German original text: „[…] Sitte der älteren Eisenzeit [folgte], die Grabgefäße in natürlichen oder künstlichen Erhebungen (sonst meist Grabhügeln) beizusetzen" (author's translation).

2 German original text: „von Menschenhand erschaffene Erhebungen [wurden] mitunter als Begräbnisplatz gewählt" (author's translation).

https://doi.org/10.2369/9783869354439.beyond-urnfields

Age vessel were found in one of several megalithic graves in the vicinity, probably representing the remains of an urn burial (Hollnagel 1969, 116). In addition to this re-use, which can be correlated with the above-mentioned phenomena, a Pre-Roman Iron Age urnfield can be found in the vicinity of Stuer near Neu-Stuer, which is only a few hundred meters away from the megalithic site (Beltz 1906, 116–117; Holtorf 1998, no. 1046). Here, the situation arises that a large urnfield, which probably represented the burial place of a whole community, was created apart from a megalithic grave but in its vicinity. The megalithic monument nevertheless served as the place for a single secondary burial of one individual. Accordingly, the megalithic grave was not re-used here as a regular burial place, but for one individual selected for reasons that are not clear. A similar situation arises in Rothenmoor, Lkr. Nordwestmecklenburg (formerly Kr. Sternberg), where in one of two neighbouring megalithic graves two Pre-Roman Iron Age burials were documented (Schuldt 1967a, 17). In addition, there is a contemporaneous urnfield in the direct vicinity (Holtorf 1998, nos. 716–717).

Likewise, the ancient monuments seem to have served partly as a source of inspiration for specific burial practices in the Pre-Roman Iron Age. Near Mankmoos, Lkr. Nordwestmecklenburg (formerly Kr. Sternberg), an interesting Pre-Roman Iron Age find was discovered in the vicinity of several megalithic graves (Schuldt 1967b). Here, a stone mound with a stone circle was built as a burial place for a small burial community and was used over a short period (stage Ib–c) in the Iron Age (Keiling 1972, 102–103). Horst Keiling sees this burial architecture, which is also attested at other sites, in connection with Bronze Age traditions, which were continued into the Pre-Roman Iron Age (Keiling 1972, 91). Cornelius Holtorf, on the other hand, points out that the megalithic tombs in the area may have been the inspiration for this type of burial ground (Holtorf 1998). His argument is supported by the fact that the site was investigated by Ewald Schuldt when he was searching for megalithic graves (Keiling 1972, 85); this shows that the site was hardly distinguishable from megalithic ones above ground. Accordingly, there is a connection between urnfield and megalithic site, the latter possibly being the source of inspiration for the construction of this specific Pre-Roman Iron Age burial site, without the secondary burials that are conceivable in the megalithic structures.

In summary, it can be concluded that ancient monuments were of great importance for the communities of the Pre-Roman Iron Age with regard to burial practices. In addition to the urnfields, which show a direct reference to burial mounds or megalithic sites, numerous (supposed?) single burials or accumulations of a very few graves can thus also be shown as secondary burials in corresponding features, while the actual burial sites of the wider communities were established and occupied elsewhere, sometimes in the vicinity of these sites. If we now see the burial in an urnfield as the regular burial form of the Pre-Roman Iron Age in northern Germany (see various contributions, this volume), we might call the isolated secondary burials in these monuments special burials or 'irregular' burials (Veit 2013). Still, these differ from the burials in urnfields only by the place of burial, apart from such extraordinary burials as the one at Twietfort. At the same time, the regular appearance of these burials shows that it is not a matter of singular and individual reasons that led to their construction, but that the Iron Age settlement communities repeatedly had reasons for deviating from the usual burial custom and for choosing the old burial sites and also regularly established entire urnfields relating to the monuments.

Other Pre-Roman Iron Age rituals observed at ancient monuments

In the previous section, the re-use of already abandoned Neolithic or Bronze Age monuments as burial grounds were the focus of the analyses. It still remains to be explored whether these were the only activities taking place at such sites during the Pre-Roman Iron Age, or whether other levels of re-use of corresponding monuments in the last centuries BCE can also be identified. A survey of

https://doi.org/10.2369/9783869354439.beyond-urnfields

recent excavations shows that other activities during the Pre-Roman Iron Age can also be identified, but their interpretation is much more difficult than the interpretation of the re-use as a burial site.

During an excavation of a burial mound in the municipality of Bredenbek, Kr. Rendsburg-Eckernförde, an interesting biography of this mound could be reconstructed. Besides the establishment of the mound with a central grave and the later insertion of secondary burials in the Late Bronze Age, Pre-Roman Iron Age activities were also taking place (Kneisel/Rode 2010/2011; 2012). Based on ^{14}C-data, Iron Age activities extended from the 2nd century BCE to the middle of the 1st century CE and thus into the Early Roman Iron Age (Kneisel/Rode 2010/2011, 143 table 1). During this period, cremation pits were placed in the burial mound, in which numerous macro-remains of rye, barley, oats, and vetch, among others, were found; the composition of these corresponds to that in a robbed secondary Late Bronze Age burial, from which a Pre-Roman Iron Age ^{14}C-date is also available. This suggests a manipulation of this grave in the Pre-Roman Iron Age. Accordingly, no burial activity is known to have occurred here during the corresponding period. Instead, a cremation pit was constructed and a post-burial manipulation occurred. During these activities, grain was deposited in these features. The intentions behind this practice remain unknown. These features are clearly distinct from burial activities, but cremation pits also occur in correlation with burial sites of this period, so at that at least a certain connection to the burial rite is conceivable. Kerstin Hofmann connects these pits with the commemoration of the dead and the lighting of fires for corresponding ceremonies. This is certainly also a plausible interpretation for a Bronze Age mound without secondary Iron Age burials (Hofmann 2008, 313).

Recent excavations in Horneburg, Lkr. Stade, led to the discovery of relatively clear evidence of ritual activities in the immediate vicinity of older monuments, as well as settlement activities (see also Schumann 2022). Among other things, the excavation documented remains of a megalithic enclosure (Fig. 5). Surrounding this monument were various Pre-Roman and Roman Iron Age features. According to a first dating of the pottery, the activities probably started earlier in the Pre-Roman Iron Age. Among the features are numerous hearths around the megalithic complexes, for which a dating into the Iron Age is assumed and which should probably be seen in a ritual context (see also Hüser 2011). Such features sometimes occur in settlement contexts but are mostly found isolated from those (Hüser 2010, 81). Thereby, they can partially be seen in both a sacred and ritual context. Accordingly, a relationship with the megalithic site in a ritual context can also be assumed for Horneburg. Furthermore, a settlement was also founded directly at the ancient monument.

Two probable Iron Age ritual activities at megalithic sites were observed on the island of Rügen, at the sites of Göhren (Hollnagel 1963) and Forst Mönchgut (Eggers 1929), where in each case a special feature in the form of a hearth directly attached to the megalithic site was documented, where ritual activities were conducted in the Pre-Roman Iron Age.

The knowledge of such structures is often deficient because they are discovered exclusively during excavations that do not focus on Pre-Roman Iron Age features; the older investigations of burial mounds and megalithic structures always focused on their construction phases. Findings from later epochs and thus findings of the Pre-Roman Iron Age were therefore merely incidental in this research. The current approach to such sites is to conduct more extensive excavations, not only of the monument itself but also its surroundings. This may lead to new discoveries, but due to the protection of megalithic sites and groups of burial mounds and the attempt and regulations to preserve these heritage sites, investigations of these types of features are nowadays seldom possible. Likewise, shallow features or superficial deposits of Iron Age pottery are usually the first to fall victim to the centuries-long erosion of such monuments. Accordingly, the few findings mentioned here are certainly likely to be part of a larger Iron Age use of these monuments, which in most cases remains undiscovered due to the preservation conditions and the general framework of the excavations.

https://doi.org/10.2369/9783869354439.beyond-urnfields

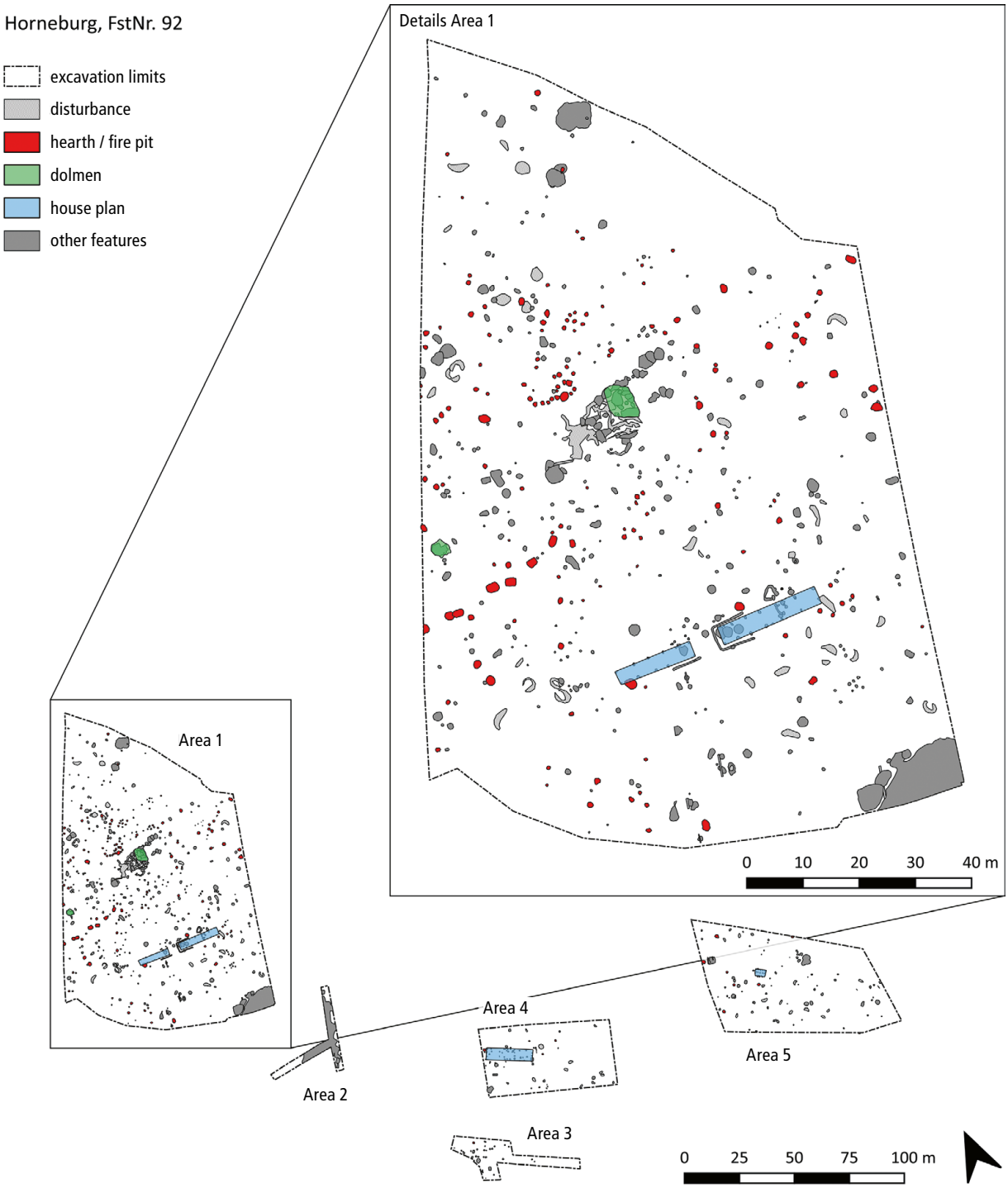


Fig. 5. The excavation plan of Horneburg, Lkr. Stade. Surrounding the remains of a dolmen, several Iron Age features were documented. Among these are fire pits and houses (after Schumann *2022, 119, fig. 5.3; image adapted from ArchaeoFirm).*

Settlement activities can also be identified in connection with older grave monuments in the Pre-Roman Iron Age in northern Germany. Cornelius Holtorf was able to prove Pre-Roman Iron Age settlement activities at a total of six megalithic sites in Mecklenburg-Western Pomerania, although the current state of knowledge hardly allows for further conclusions about these. Pottery from the Pre-Roman Iron Age was found at different sites, but the context of these finds cannot be established.

https://doi.org/10.2369/9783869354439.beyond-urnfields

However, settlement activities seem to be quite conceivable (Holtorf 1998), despite the problem that in many cases the character of the Iron Age sites remains ambiguous.

Besides the location of settlements directly at corresponding monuments, their further embedding into the cultural landscape is also decisive. The analyses of Cornelius Holtorf show that some Pre-Roman Iron Age settlements were located at a distance of only a few hundred meters from megalithic sites (Holtorf 1998). For the northern German region and for adjacent areas, the Celtic Fields and the *Irreguläre Bank-Senken-Feldsysteme* (IBSF), which have been recognised especially in recent years by the use of LiDAR scans (Arnold 2011; 2012), also offer insights into land use in prehistory and early history. These ancient field systems date mainly from the Pre-Roman Iron Age to the Roman Iron Age (Arnold 2011; 2012; cf. Fries 1995, 18), which means that a good part of these inconspicuous field systems can be assigned to the Pre-Roman Iron Age and thus represent activity areas in the vicinity of the corresponding settlements. Again and again, burial mounds and megalithic tombs can be found close to these cultivation systems. In a forest area south of Oldendorf, Lkr. Stade, for example, a well-preserved system of Celtic Fields could be revealed (Nösler 2018), along with two burial mounds of unknown date located at the southeastern edge of the forest. Here, too, it can thus be assumed that potentially older sites were integrated into the cultural landscape and the agricultural space of a settlement.

The re-use of old artefacts during the Pre-Roman Iron Age

In addition to the re-use of old burial sites outlined above, older material culture within the framework of the Pre-Roman Iron Age in northern Germany can be identified, too, demonstrating that there was also contact between these communities and material legacies in the form of artefacts from older periods, not only corresponding monuments.

While a comprehensive reference to the ancient cultural landscape can thus be shown, the handling of artefacts of ancient times by Pre-Roman Iron Age communities is only rarely discernible. The certainly most striking example leads back to the burials and is represented by an urn grave from Borstel, Lkr. Nienburg/Weser. Here, an urn from phase Jastorf a was found in a mound. The urn was covered by a bowl and held some cremated bones as well as an axe dating to the Early Bronze Age periods II/III. Hence, the axe was manufactured about 600 years before its deposition in a burial during the Pre-Roman Iron Age (Fig. 6). Since this is the only urn observed from this non-expertly excavated burial mound, it cannot be determined whether the axe came from a disturbed primary grave or not. It is probably a coherent find, and the axe might therefore be regarded as an antiquity (Gutmann 1954). Something quite similar is to be seen at Döthen, Lkr. Osnabrück, a site from the beginning of the Pre-Roman Iron Age. Here, a Pre-Roman Iron Age urn in which a stone axe was also stored was found in the museum inventory (Schroller 1936). Even if the circumstances of the find cannot be verified more precisely, it might represent a corresponding phenomenon. In this context, a find from Vesenbühren, Lkr. Cloppenburg, should also be mentioned. However, since only the axe is preserved here, this find cannot be clarified (Schroller 1936, 32). In fact, antiquities are rarely found in Pre-Roman Iron Age burials. The state of research on the settlements also does not allow a detailed insight into this topic at present. I do not know of any antiquities found in Pre-Roman Iron Age settlement contexts in northern Germany.

Especially in comparison with the extraordinarily frequent re-use of older burial sites in the Pre-Roman Iron Age outlined above, only a surprisingly small number of burials were found in which antiquities were deposited. It cannot be ascertained whether this represents a deliberate selection in the context of the burial ritual, i.e. that these artefacts were tabooed, or if the Pre-Roman Iron Age communities only rarely got hold of these. Also, the burial practices concerning grave goods need to

https://doi.org/10.2369/9783869354439.beyond-urnfields

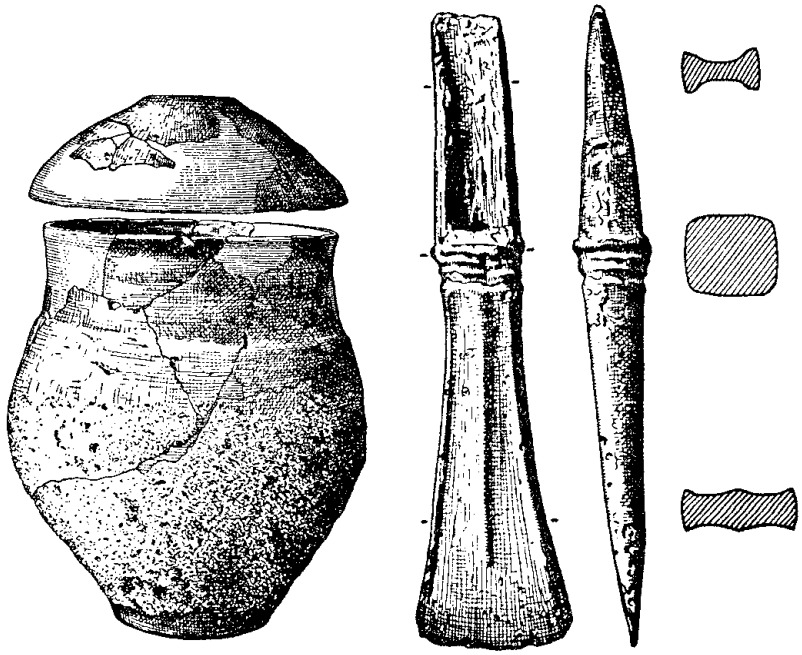


Fig. 6. The finds from Borstel, Lkr. Nienburg/Weser. The urn and bowl used as a lid date to the early Pre-Roman Iron Age, whereas the bronze axe dates to the Bronze Age (after Gutmann *1954, 31 figs. 1–2).*

be considered. It must be emphasised that the Pre-Roman Iron Age in northern Germany is characterised by a burial practice in which only few grave goods were deposited (Brandt 2009, 179–180; Bräunig 2014; see various contributions, this volume). Therefore, even though ancient artefacts might indeed have circulated during the northern German Pre-Roman Iron Age, it is not surprising that hardly any objects from past times are found in burial contexts. Nevertheless, old relics were part of a broader engagement of Iron Age communities with the distant past.

A meaningful distant past: Collective memory and ancestors

Burial sites have always played a decisive role in the investigation of identities and communication. On the one hand, this is due to the number of sources, because burial sites, especially burial mounds, were often investigated early on and were thus a starting point for corresponding questions. On the other hand, deliberate deposition, as observed in graves, leads to statements other than, for example, most settlement finds (Hofmann 2013, 272). In any case, conscious action in combination with relevant social factors can be traced archaeologically in burials. Here, religious and cultic ideas as well as ideas about the afterlife, social structures, origin, circumstances of death or ancestor veneration are important factors, as well as many other aspects (Parker-Pearson 1999; Hofmann 2008, 100 fig. 28). In the last decades, especially prehistoric and early historic identities have often been the research focus (fundamentally Díaz-Andreu et al. 2005; Insoll 2007). The graves especially can be seen as a place of the (re-)negotiation of identities (Reimers 1999), in which these are expressed and which in turn influence and transmit identities through their specific expression (Brather 2010, especially for early medieval burials in central Europe). These can include, among other burial rituals, the treatment of the corpse, the selection of grave goods by the community, the type of grave monument, but also the choice of burial site.

One aspect that can influence the choice of burial site and is also interconnected with the re-use of ancient monuments is the aspect of memory and the perception and appropriation of the past in the context of burial rituals. In recent decades, this topic has been debated intensely, especially in

https://doi.org/10.2369/9783869354439.beyond-urnfields

the English-speaking world (among others, Bradley 1987; 2002; Whitley 2002; Jones 2007; Lillios 2008), and it has also increasingly gained a foothold in central European archaeology (see e.g. Holtorf 2005; Veit 2005; Hofmann 2013; Müller 2016; Hofmann et al. 2017; Schumann 2021). The memory aspect is discussed in the context of burials, for example, using the concept of collective memory. Fundamental to this are the works of Maurice Halbwachs, who coined the term 'collective memory' (*mémoire collective*) and highlighted the character of the social construction of the past (Halbwachs 1985; 1991). Building on this, Aleida and Jan Assmann, among others, shaped the concept of cultural memory (see *inter alia* Assmann 1988; 1992; 1999). With regard to collective memory, they in turn distinguished between communicative and cultural memory. While the former is negotiated via oral history (Vansina 1985) and refers to the recent past, the latter is oriented towards a mythical primeval time and the absolute past (Assmann 1992). 'Cultural memory, on the other hand, is a memory bound to fixed objectivations, highly endowed and ceremonialised, and above all made present in the cultural time dimension of celebration. The cultural memory transports a fixed stock of contents and meaning, for whose continuation and interpretation specialists are trained (e.g. priests, shamans or archivists). Its object are mythical events of a distant past interpreted as founding the community'[3] (Erll 2011, 31). What is important here, especially in distinction to communicative memory, is that cultural memory is preserved and passed on by specialists: 'Cultural memory always has its special bearers. These include the shamans, bards and griots as well as the priests, teachers, artists, scribes, scholars, mandarins, and whatever all the agents of knowledge may be called'[4] (Assmann 1992, 54). In this way, it is detached from the everyday situation in which the communicative memory is entangled. At the same time, cultural memory is thus distinctive and clearly integrated into the respective power relations. In addition, there are numerous other concepts of cultural memory and remembrance, of which Pierre Nora's *lieux de mémoire* (sites of memory) certainly have the most prominent position in archaeology (Hofmann et al. 2017). Moreover, since cultures of both memory and cultural memory possess a certain materiality (Jones 2007), aspects of past perception and memory are also clearly reflected in archaeological sources and thus allow the investigation of corresponding aspects from an archaeological perspective (see, among others, Veit 2005). The connection of Iron Age urnfields to ancient monuments offers an opportunity to investigate notions of remembrance and perceptions of the past in the material world preserved in the archaeological record.

Building on this, ancestor veneration in particular is often at the centre of archaeological considerations as an aspect related to memory and burial rites (e.g. Müller 2016). Nevertheless, it should be noted that the term 'ancestor' is often used in archaeology in an undifferentiated general way to refer to aspects of memory in the context of burial sites – and beyond (Whitley 2002; Hill/Hageman 2016). Memory and appropriation of the past can refer to relatively recent phenomena, such as the graves of an older generation, but can also refer to millennia-old monuments. Accordingly, a distinction should be made here between remembrance and appropriation that is not linked to memory of a factual past. This becomes particularly clear in the many places where there is evidence of the re-use of burial monuments visible above ground, especially megalithic sites and burial mounds, from various periods (see Sopp 1999 for northern Germany). It is crucial to note that the thematic complex around

3 German original text: „Bei dem kulturellen Gedächtnis handelt es sich hingegen um eine an feste Objektivationen gebundene, hochgradig gestiftete und zeremonialisierte, v.a. in der kulturellen Zeitdimension des Festes vergegenwärtigte Erinnerung. Das kulturelle Gedächtnis transportiert einen festen Bestand an Inhalten und Sinnstiftungen, zu deren Kontinuierung und Interpretation Spezialisten ausgebildet werden (z.B. Priester, Schamanen oder Archivare). Sein Gegenstand sind mythische, als die Gemeinschaft fundierende interpretierte Ereignisse einer fernen Vergangenheit" (author's translation).

4 German original text: „Das kulturelle Gedächtnis hat immer seine speziellen Träger. Dazu gehören die Schamanen, Barden, Griots ebenso wie die Priester, Lehrer, Künstler, Schreiber, Gelehrten, Mandarine und wie die Wissensbevollmächtigten alle heißen mögen" (author's translation).

https://doi.org/10.2369/9783869354439.beyond-urnfields

memory is not a topic exclusively focused on the past, but that corresponding references are always used in a respective present and help to influence it (Dietler 1998; Bernbeck et al. 2017, 26–27). Thus, various social, political, or ritual domains can be shaped through corresponding references to the past. In this way, memory and the imagined past can be deliberately manipulated or altered (Kansteiner 2002, 180) in order to legitimise existing realities of the present (Weiss-Krejci 2015; Sommer 2017). This is discussed in archaeology especially for highly stratified systems of power (Fernandez-Götz 2014; Cooney 2015; Müller 2016), but can also be understood more broadly. Here, for example, the appropriation of land also plays a crucial role, which can be generated through the construction of relationships with former inhabitants and their legacies (for a general discussion of burials and property claims, see, among others, Morris 1991). Likewise, putative ancestors can emerge in this context when, in the sense of invented traditions, a fictitious past is generated that is then remembered accordingly (Hobsbawm 1983). Here we see that, in archaeology, it is difficult to separate memory from other levels of appropriation of the past (Andrén 2013, 279). In addition, cultic and religious aspects, which are observed due to specific ideas of dealing with corresponding places, also play a role. All of this can have an identity-forming effect on a burial and settlement community, sending messages also to members other than those involved in the burial ritual. In any case, it becomes clear that the past is not a static entity, but is constantly renegotiated in specific contexts and social groups and changed through different memories.

Accordingly, the circumstance that ancient burial sites were regularly revisited also offers numerous points of departure for the further interpretation of the intentions of the Iron Age communities. At the same time, a broader perspective on the use of old monuments and material culture shows that this is only one aspect of the perception and appropriation of the past and of memory in the Pre-Roman Iron Age.

For the sites discussed here, however, a gap of several centuries can be shown between the original phase of use and the Iron Age re-use. Thus, the construction of the monuments clearly belongs to the time period that Jan Assmann has called 'mythical prehistory' or 'mythical time of origin' that lies beyond the actual biographical or genealogical memory (Assmann 1988). Bronze Age funerary practices had already changed about 600 years before the beginning of the Pre-Roman Iron Age in that the custom of constructing burial mounds was abandoned in favour of urn burials (for Schleswig-Holstein see Kneisel et al. 2019, 1608). Accordingly, the youngest re-used monuments at the beginning of the Iron Age had already existed for about 24 generations. Although they were often re-used during the later Bronze Age, and partially into the Iron Age, it remains to be questioned whether concrete concepts were still associated with them. At the same time, it should be pointed out that, even in non-literate societies, memories can sometimes bridge very long periods of time (Nunn/Reid 2015; Nunn 2018), thus it cannot automatically be assumed that the selection was random or that the old monuments were (exclusively) charged with new meaning. The preference for Bronze Age monuments could indicate a deliberate selection (see above). However, the fact that megalithic sites were also re-used may again show that both types were seen as old monuments. They were not differentiated in their temporality and their different construction, but were imagined as relics of a distant past, which united different pasts into a mythical past. Likewise, with monuments that were no longer anchored in cultural memory, new traditions and myths could have been invented and thus an imagined past established. This seems more likely for the megalithic sites than for the Bronze Age burial mounds but needs to be considered in general regarding the re-use.

This re-use could indicate ancestor veneration (argued in more depth in Schumann 2021; generally on the archaeology of ancestor veneration: Hill/Hageman 2016), as can also be made plausible for other regions at the same time (Müller 2016; Schumann/Wendling 2023). However, it is precisely the great difference in time and the discontinuities that exist in some cases that would speak more in favour of a concept of collective ancestors or also of putative ancestors. The fact that in some

https://doi.org/10.2369/9783869354439.beyond-urnfields

cases only very few burials can be found at these monuments and, rarely, entire urnfields, could also indicate a distinctive momentum with which the communities buried there distinguished themselves from other groups.

It should also be mentioned that the subsequent use of these monuments is not limited to the Pre-Roman Iron Age. The placing of secondary urns in Bronze Age burial mounds can range from the later Bronze Age to the Iron Age. Similarly, ancient monuments were re-visited during the Roman Iron Age and the Migration Period (Sopp 1999; Schumann 2022). However, both a reduction as well as a clear regional restriction can be observed over the course of time. On the one hand, it suggests that the significance and impact of this distant past had diminished over the centuries. On the other hand, the appropriation of these ancient burial sites, which can later on only be observed on a regional level, is interpreted as an identity-forming characteristic of an ethnic group (Thäte 1996; critically commented on by Härke/Williams 1997). This shows the importance of the past for the conception of a specific present. In any case, the Pre-Roman Iron Age is part of a long-term tradition in northern Germany and the distant past was a vital part of cultural identity, based on frequent re-use in many regions in northern Germany.

The choice of burial site at ancient monuments is thus not just a curiosity or coincidence, but an integral part of the Iron Age burial system. Therefore, the value system and ideas of these communities also need further consideration by Iron Age archaeology.

Bibliography

Andrén 2013: A. Andrén, The past in ancient Scandinavia. Scandinavian Studies 85(3), 2013, 267–281.

Arnold 2011: V. Arnold, Celtic Fields und andere urgeschichtliche Ackersysteme in historisch alten Waldstandorten Schleswig-Holsteins aus Laserscandaten. Archäologisches Korrespondenzblatt 41, 2011, 439–455.

Arnold 2012: V. Arnold, Laserscandaten als Prospektionshilfe zur punktuellen Untersuchung von urgeschichtlichen Ackersystemen insbesondere des Jungmoränengebietes in Schleswig-Holstein. In: A. Stobbe/U. Tegtmeier (eds.), Verzweigungen. Eine Würdigung für A. J. Kalis und J. Meurers-Balke. Frankfurter Archäologische Schriften 18 (Bonn 2012) 33–47.

Asmus 1948: W. Asmus, Die Ausgrabungen von steinzeitlichen Hügeln auf dem Gräberfelde von Melzingen, Kr. Uelzen. Nachrichten aus Niedersachsens Urgeschichte 17, 1948, 3–50.

Assmann 1988: J. Assmann, Kollektives Gedächtnis und kulturelle Identität. In: J. Assmann/T. Hölscher (eds.), Kultur und Gedächtnis (Frankfurt a. M. 1988) 9–19.

Assmann 1992: J. Assmann, Das kulturelle Gedächtnis. Schrift, Erinnerung und politische Identität in frühen Hochkulturen (München 1992).

Assmann 1999: A. Assmann, Erinnerungsräume. Formen und Wandlungen des kulturellen Gedächtnisses (München 1999).

Beltz 1906: R. Beltz, Die Grabfelder der älteren Eisenzeit in Mecklenburg. Jahrbücher des Vereins für Mecklenburgische Geschichte und Altertumskunde 71, 1906, 1–152.

Bernbeck et al. 2017: R. Bernbeck/K. Hofmann/U. Sommer, Mapping memory, space and conflict. In: K. Hofmann/R. Bernbeck/U. Sommer (eds.), Between memory sites and memory networks. New archaeological and historical perspectives. Topoi 45 (Berlin 2017) 9–32.

Bradley 1987: R. Bradley, Time regained: The creation of continuity. Journal of the British Archaeological Association 140(1), 1987, 1–17.

Bradley 2002: R. Bradley, The past in prehistoric societies (London 2002).

Brandt 2009: J. Brandt, Gesellschaftsstrukturen in der Jastorfkultur. In: W. Budesheim/H. Keiling (eds.), Die Jastorf-Kultur. Forschungsstand und kulturhistorische Probleme der vorrömischen Eisenzeit. Beiträge für Wissenschaft und Kultur 9 (Wentorf b. Hamburg 2009) 179–192.

Brather 2010: S. Brather, Bestattungen und Identitäten: Gruppierungen innerhalb früh-mittelalterlicher Gesellschaften. In: W. Pohl/M. Mehofer (eds.), Archaeology of Identity – Archäologie der Identität. Österreichische Akademie der Wissenschaften, Philosophisch-Historische Klasse, Denkschrift 406 = Forschungen zur Geschichte des Mittelalters (Wien 2010) 25–49.

Bräunig 2014: R. Bräunig, Die Bestattungssitten der Jastorfkultur. In: J. Brandt/B. Rauchfuß (eds.), Das Jastorf-Konzept und die vorrömische Eisenzeit im nördlichen Mitteleuropa. Beiträge der internationalen Tagung zum einhundertjährigen Jubiläum der Veröffentlichung „Die ältesten Urnenfriedhöfe bei Uelzen und Lüneburg“ durch Gustav Schwantes 18.–22.05.2011 in Bad Bevesen. Veröffentlichung des Helms-Museums, Archäologisches Museum Hamburg, Stadtmuseum Harburg 105 (Hamburg 2014) 81–90.

Cooney 2015: G. Cooney, Icons of antiquity: Remaking megalithic monuments in Ireland. In: M. Díaz-Guardamino/L. García Sanjuán/D. Wheatley (eds.), The lives of prehistoric monuments in Iron Age, Roman, and medieval Europe (Oxford 2015) 55–76.

https://doi.org/10.2369/9783869354439.beyond-urnfields

Díaz-Andreu et al. 2005: M. Díaz-Andreu/S. Lucy/S. Babić/D. Edwards, The archaeology of identity: Approaches to gender, age, status, ethnicit and religion (London, New York 2005).
Dietler 1998: M. Dietler, A tale of three sites: The monumentalization of Celtic oppida and the politics of collective memory and identity. World Archaeology 30(1), 1998, 72–89.

Eggers 1929: H. J. Eggers, Neue Funde vom Hünengrab in der Forst Mönchgut auf Rügen. Prähistorische Zeitschrift 20(3–4), 1929, 267–271.
Eichfeld 2005: I. Eichfeld, Die vorrömische Eisenzeit im Landkreis Rotenburg (Wümme). Eine landschaftsarchäologische Untersuchung mit Hilfe von GIS. Archäologische Berichte des Landkreises Rotenburg (Wümme) 12 (Oldenburg 2005).
Erll 2011: A. Erll, Kollektives Gedächtnis und Erinnerungskulturen. Eine Einführung (Stuttgart, Weimar 2011).

Fernández-Götz 2014: M. Fernández-Götz, Sanctuaries and ancestor worship at the origin of the oppida. In: V. Sirbu/S. Matei (eds.), Residential Centres (dava, emporium, oppidum, hilfort, polis) and cult places in the second Iron Age of Europe. Mousaios 19 (Buzău 2014) 111–132.
Fries 1995: J. Fries, Vor- und frühgeschichtliche Agrartechnik auf den Britischen Inseln und dem Kontinent. Eine vergleichende Studie. Internationale Archäologie 26 (Rahden/Westf. 1995).

Gutmann 1954: J. Gutmann, Ein atypischer Grabfund von Borstel, Kr. Nienburg/Weser. Die Kunde N.F. 5, 1954, 30–33.

Hage 2012: F. Hage, Das bronzezeitliche Hügelgräberfeld bei Wittenwater, Ldkr. Uelzen. In: J. P. Brozio/F. Hage, Zwei Studien zu den neolithischen und bronzezeitlichen Grabanlagen der Lüneburger Heide. Beiträge zur Archäologie in Niedersachsen 17 (Rahden/Westf. 2012) 135–242.
Halbwachs 1985: M. Halbwachs, Das Gedächtnis und seine sozialen Bedingungen (Frankfurt 1985).
Halbwachs 1991: M. Halbwachs, Das kollektive Gedächtnis (Frankfurt 1991).
Härke/Williams 1997: H. Härke/H. Williams, Angelsächsische Bestattungsplätze und ältere Denkmäler: Bemerkungen zur zeitlichen Entwicklung und Deutung des Phänomens. Archäologische Informationen 20(1), 1997, 25–27.
Hässler 1972: H.-J. Hässler, Ein neolithisches Flachgrab auf dem Urnenfriedhof der älteren vorrömischen Eisenzeit in Soderstorf, Kr. Harburg. Nachrichten aus Niedersachsens Urgeschichte 41, 1972, 171–176.
Hässler 1976/1977: H.-J. Hässler, Zur inneren Gliederung und Verbreitung der vorrömischen Eisenzeit im südlichen Niederelbegebiet I–III. Materialhefte zur Ur- und Frühgeschichte Niedersachsens 11 (Hildesheim 1976/1977).
Hill/Hageman 2016: E. Hill/J. Hageman, The archaeology of ancestors. In: E. Hill/J. Hageman (eds.), The archaeology of ancestors: Death, memory, and veneration (Gainesville 2016) 42–80.
Hobsbwam 1983: E. Hobsbawm, Introduction: inventing traditions. In: E. Hobsbawm/T. Ranger (eds.), The invention of tradition (Cambridge 1983) 1–14.

Hofmann 2008: K. P. Hofmann, Der rituelle Umgang mit dem Tod. Untersuchungen zu bronze- und früheisenzeitlichen Brandbestattungen im Elbe-Weser-Dreieck. Schriftenreihe des Landschaftsverbandes der ehemaligen Herzogtümer Bremen und Verden 32 = Archäologische Berichte des Landkreises Rotenburg (Wümme) 14 (Oldenburg 2008).
Hofmann 2013: K. P. Hofmann, Gräber und Totenrituale: Zu aktuellen Theorien und Forschungsansätzen. In: M. K. H. Eggert/U. Veit (eds.), Theorie in der Archäologie: Zur jüngeren Diskussion in Deutschland. Tübinger Archäologische Taschenbücher 10 (Münster et al. 2013) 269–298.
Hofmann et al. 2017: K. Hofmann/R. Bernbeck/U. Sommer (eds.), Between memory sites and memory networks. New archaeological and historical perspectives. Topoi 45 (Berlin 2017).
Hollnagel 1963: A. Hollnagel, Gestörte jungsteinzeitliche Gräber und Siedlungsreste der älteren Eisenzeit auf dem „Langen Feld" bei Göhren, Kreis Rügen. Bodendenkmalpflege in Mecklenburg, Jahrbuch 1963, 7–30.
Hollnagel 1969: A. Hollnagel, Die Großsteingräber von Stuer, Kreis Röbel. Bodendenkmalpflege in Mecklenburg, Jahrbuch 1969, 111–142.
Holtorf 1998: C. Holtorf, Monumental past: The life-histories of Megalithic monuments in Mecklenburg-Vorpommern (Germany) (Toronto 1998). http://wayback.archive-it.org/6473/20160819142727/https://tspace.library.utoronto.ca/citd/holtorf/0.1.html.
Holtorf 2005: C. Holtorf, Geschichtskultur in ur- und frühgeschichtlichen Kulturen Europas. In: J. Assmann/K. Müller (eds.), Der Ursprung der Geschichte: Archaische Kulturen, das Alte Ägypten und das frühe Griechenland (Stuttgart 2005) 87–111.
Hüser 2010: A. Hüser, Neue Ausgrabungen in Hamburg-Marmstorf, Fundplatz 68. Hammaburg N.F. 15, 2010, 63–98.
Hüser 2011: A. Hüser, Kultische Feuer? Gar- oder Herdgruben aus dem Großraum Hamburg. Hammaburg N.F. 16, 2011, 95–122.

Insoll 2007: T. Insoll (ed.), The archaeology of identity. A reader (London, New York 2007).

Jacob-Friesen 1959: K. H. Jacob-Friesen, Einführung in Niedersachsens Urgeschichte I. Veröffentlichungen der urgeschichtlichen Sammlungen des Landesmuseums Hannover 15 (Hildesheim 1959).
Jones 2007: A. Jones, Memory and material culture (Cambridge 2007).

Kansteiner 2002: W. Kansteiner, Finding meaning in memory: A methodological critique of collective memory studies. History and Theory 41, 2002, 179–197.
Keiling 1969: H. Keiling, Die vorrömische Eisenzeit im Elde-Karthane-Gebiet (Kreis Perleberg und Kreis Ludwigslust). Beiträge zur Ur- und Frühgeschichte der Bezirke Rostock, Schwerin und Neubrandenburg 3 (Schwerin 1969).
Keiling 1972: H. Keiling, Ein Steinhügelgrab mit Steinkreis aus der vorrömischen Eisenzeit von Mankmoos, Kreis Sternberg. Bodendenkmalpflege in Meckklenburg, Jahrbuch 1972, 85–125.
Keiling 1991: H. Keiling, Eisenzeitliche Funde aus Zislow, Kreis Röbel. In: U. Schoknecht, Zislow. Ergebnisse ar-

https://doi.org/10.2369/9783869354439.beyond-urnfields

chäologischer Untersuchungen. Beiträge zur Ur- und Frühgeschichte Mecklenburg-Vorpommerns 25 (Schwerin 1991) 75–86.

Keiling 2009: H. Keiling, „Jastorf". Ein Kulturbegriff im Wandel. In: W. Budeheim/H. Keiling (eds.), Die Jastorf-Kultur. Forschungsstand und kulturhistorische Probleme der vorrömischen Eisenzeit. Beiträge für Wissenschaft und Kultur 9 (Wentorf b. Hamburg 2009) 7–40.

Kneisel/Rode 2010/2011: J. Kneisel/S. Rode, Ein bronzezeitlicher Grabhügel in Kronsburg-Glinde, Bredenbek LA 29, Kreis Rendsburg-Eckernförde. Offa 67/68, 2010/2011 (2014), 129–184.

Kneisel/Rode 2012: J. Kneisel/S. Rode, Bredenbek LA 29 – Ein älterbronzezeitlicher Grabhügel und seine Nutzung durch die Zeiten. Symposium 13.–14.04.2012 in Jarplund. Arkæologie i Slesvig/Archäologie in Schleswig 14, 2012, 59–70.

Kneisel et al. 2019: J. Kneisel/W. Dörfler/St. Dreibrodt/St. Schäfer-Di Maida/I. Freese, Cultural change and population dynamics during the Bronze Age: Integrating archaeological and palaeoenvironmental evidence for Schleswig-Holstein, Northern Germany. The Holocene 29(10), 2019, 1607–1621.

Krüger 1961: H. Krüger, Die Jastorfkultur in den Kreisen Lüchow-Dannenberg, Lüneburg, Uelzen und Soltau. Göttinger Schriften zur Vor- und Frühgeschichte 1 (Neumünster 1961).

Lillios 2008: K. Lillios, Engaging memories of European prehistory. In A. Jones (ed.), Prehistoric Europe: Theory and Practice. Blackwell Studies in Global Archaeology 12 (Chichester 2008) 228–254.

Morris 1991: I. Morris, The archaeology of ancestors. The Saxe/Goldstein hypothesis revisited. Cambridge Archaeological Journal 1(2), 1991, 147–169.

Müller 2016: F. Müller, Menschen und Heroen. Ahnenkult in der Frühgeschichte Europas (Berlin 2016).

Müller 2017: J. Müller, Großsteingräber – Grabenwerke – Langhügel. Frühe Monumentalbauten Mitteleuropas. Archäologie in Deutschland, Sonderheft 11 (Darmstadt 2017).

Nikulka 2014: F. Nikulka, Zur Regionalisierung der Jastorf-Kultur. Theoretische und methodische Grundlagen. In: J. Brandt/B. Rauchfuß (eds.), Das Jastorf-Konzept und die vorrömische Eisenzeit im nördlichen Mitteleuropa. Beiträge der Internationalen Tagung zum einhundertjährigen Jubiläum der Veröffentlichung der „Ältesten Urnenfriedhöfe bei Uelzen und Lüneburg" durch Gustav Schwantes, 18.–22.05.2011 in Bad Bevensen. Veröffentlichung des Helms-Museums, Archäologisches Museum Hamburg, Stadtmuseum Harburg 105 (Hamburg 2014) 49–56.

Nikulka 2019: F. Nikulka, Netzwerke und Kontakte. Die Vorrömische Eisenzeit im Norden. In: E. Bánffy/K. Hofmann/Ph. von Rummel (eds.), Spuren des Menschen. 800 000 Jahre Geschichte in Europa (Darmstadt 2019) 185–198.

Nösler 2018: D. Nösler, Mit dem Laser in die Vergangenheit. Neu entdeckte Celtic Fields im Landkreis Stade. Archäologie in Niedersachsen 2018, 143–147.

Nunn 2018: P. Nunn, The edge of memory. Ancient stories, oral tradition and the post-glacial world (London 2018).

Nunn/Reid 2015: P. Nunn/N. Reid, Aboriginal memories of inundation of the Australian coast dating from more than 7000 years ago: Australian Geographer 47, 2015, 1 1–47.

Parker-Pearson 1999: M. Parker-Pearson, The Archaeology of Death and Burial (London 1999).

Reimers 1999: E. Reimers, Death and Identity: Graves and Funerals as Cultural Communication. Mortality 4, 1999, 147–166.

Rennebach 1974: G. Rennebach, Eine Nachbestattung der vorrömischen Eisenzeit an einem Megalithgrab im Ganzliner Holz bei Twietfort, Kreis Lübz. Bodendenkmalpflege in Mecklenburg, Jahrbuch 1974, 173–192.

Schroller 1936: H. Schroller, Über das Vorkommen von Steingeräten in der Metallzeit (gleichzeitig ein Beitrag zum Donarkult). Die Kunde 4(2), 1936, 31–35.

Schoknecht 1991: U. Schoknecht, Zislow. Ergebnisse archäologischer Untersuchungen. Beiträge zur Ur- und Frühgeschichte Mecklenburg-Vorpommerns 25 (Schwerin 1991).

Schuldt 1967a: E. Schuldt, Ein Hünenbett ohne Kammer von Rothenmoor, Kreis Sternberg. Bodendenkmalpflege in Mecklenburg, Jahrbuch 1967, 17–22.

Schuldt 1967b: E. Schuldt, Drei Megalithgräber von Mankmoos, Kreis Sternberg. Bodendenkmalpflege in Mecklenburg, Jahrbuch 1967, 23–33.

Schumann 2021: R. Schumann, Relikte ferner Zeiten. Zur Wahrnehmung und Aneignung von fernen Vergangenheiten in Kulturgruppen der jüngeren Vor- und Frühgeschichte Mitteleuropas. Unpubl. habilitation dissertation (Hamburg 2021).

Schumann 2022: R. Schumann, The Distant Past of a Distant Past …: Perception and Appropriation of Deep History During the Iron Ages in Northern Germany (Pre-Roman Iron Age, Roman Iron Age, and Migration Period). In: E. Weiss-Krejci/S. Becker/P. Schwyzer (eds.), Interdisciplinary Explorations of Postmortem Interaction. Bioarchaeology and Social Theory (Cham 2022) 113–132.

Schumann/Wendling 2023: R. Schumann/H. Wendling, Zur Nachnutzung älterer Denkmäler in der jüngeren Eisenzeit. In: R. Schumann/M. Augstein/J. Fries-Knoblach/St. Gentner/M. Kirchmayr/M. Kohle/H. Wendling (eds.), Eisenzeitliche Erinnerungskulturen. Zum Umgang eisenzeitlicher Gemeinschaften mit Relikten der Vergangenheit. Beiträge zur Sitzung der AG Eisenzeit auf dem digitalen DAK in Kiel im September 2020. Beiträge zur Ur- und Frühgeschichte Mitteleuropas 107 (Langenweißbach 2023) 75–93.

Schwantes 1911: G. Schwantes, Die ältesten Urnenfriedhöfe bei Uelzen und Lüneburg. Die Urnenfriedhöfe in Niedersachsen 1 (Hannover 1911).

Sommer 2017: U. Sommer, The appropriation or the destruction of memory? Bell Beaker 're-use' of older sites. In K. Hofmann/R. Bernbeck/U. Sommer (eds.), Between memory sites and memory networks: New archaeological and historical perspectives. Berlin Studies of the Ancient World 45 (Berlin 2017) 33–70.

Sopp 1999: M. Sopp, Die Wiederaufnahme älterer Bestattungsplätze in den nachfolgenden vor- und frühgeschichtlichen Perioden in Norddeutschland. Antiquitas III, 39 (Bonn 1999).

https://doi.org/10.2369/9783869354439.beyond-urnfields

Thäte 1996: E. Thäte, Alte Denkmäler und frühgeschichtliche Bestattungen: Ein sächsisch-angelsächsischer Totenbrauch und seine Kontinuität. Archäologische Informationen 19, 1996, 105–116.

Vansina 1985: J. Vansina, Oral tradition as history (Oxford 1985).

Veit 2005: U. Veit, Kulturelles Gedächtnis und materielle Kultur in schriftlosen Gesellschaften: Anthropologische Grundlagen und Perpektiven für die Urgeschichtsforschung. In: T. Kienlin (eds.), Die Dinge als Zeichen: Kulturelles Wissen und materielle Kultur. Internationale Fachtagung an der Johann Wolfgang Goethe-Universität Frankfurt am Main 3.–5. April 2003. Universitätsforschungen zur prähistorischen Archäologie 127 (Bonn 2005) 23–35.

Veit 2013: U. Veit, ‚Sonderbestattungen': Vorüberlegungen zu einem integrierten Ansatz ihrer Erforschung. In: N. Müller-Scheeßel (ed.) ‚Irreguläre' Bestattungen in der Urgeschichte: Norm, Ritual, Strafe…? Akten der Internationalen Tagung in Frankfurt am Main 3.–5. Februar 2012. Kolloquien zur Vor- und Frühgeschichte 19 (Bonn 2013) 11–24.

Wegewitz 1962: W. Wegewitz, Der Urnenfriedhof von Ehestorf-Vahrendorf im Kreise Harburg aus der vorrömischen Eisen- und der älteren römischen Kaiserzeit. Die Urnenfriedhöfe in Niedersachsen 6 (Hildesheim 1962).

Weiss-Krejci 2015: E. Weiss-Krejci, The plot against the past: Reuse and modification of ancient mortuary monuments as persuasive efforts of appropriation. In M. Díaz-Guardamino/L. García Sanjuán/D. Wheatley (eds.), The lives of prehistoric monuments in Iron Age, Roman, and medieval Europe (Oxford 2015) 307–324.

Whitley 2002: J. Whitley, Too many ancestors. Antiquity 76, 2002, 119–126.

Robert Schumann
Universität Hamburg
Institut für Vor- und Frühgeschichtliche Archäologie
Hamburg
Germany
robert.schumann@uni-hamburg.de

https://doi.org/10.2369/9783869354439.beyond-urnfields

https://doi.org/10.2369/9783869354439.beyond-urnfields

The ceremonial wagon and its relationship with the Urnfield burial rite

Claudia Pankau

Keywords: Wagon, religion, Late Bronze Age, Urnfield culture, burial rite

Abstract: Around 1300 BC, bronze fittings which probably originated from four-wheeled ceremonial wagons pulled by a team of horses can be traced for the first time in the Carpathian Basin and in southern central Europe. In the course of the Late Bronze Age, such fittings, here simplified as 'wagon bronzes', spread to western and northern Europe. While the ceremonial wagon was implemented independently in France and Great Britain, its real, i.e. materially and not only pictorially verifiable occurrence in the area of the Nordic Bronze Age can be described as marginal. Finds such as those from Egemose, Skjerne and Lusehøj were probably imports, especially from the pile dwelling area to the south. In the north, an independent take-up of the 'ceremonial wagon idea' can only be seen in the objects associated with horse teams from the hoard finds of the Ückeritz-Stolzenburg type, which can mainly be dated to Period V. Although these fittings allow almost no conclusions about the wagon itself, the yoke attachments with central, partly vessel-shaped sculptures are strongly reminiscent of the 'vessel and sun' symbolism of the Urnfield culture. They thus indicate that the exchange with the Urnfield culture was not limited to the material level. In general, wagon bronzes are predominantly found in hoards; in burial contexts they only occur to a considerable extent in the early Urnfield Hart an der Alz group in the northern Alpine foothills. From these findings, a close relationship between the ceremonial wagon and the innovative burial ritual of the Urnfield culture (cremation of corpses on the pyre, fragmentation of grave goods, separation of status symbols in the form of grave deposits) can be deduced. It can be assumed that the ceremonial wagon had an important function in the propagation of new religious ideas. In the HaC-period wagon graves, this 500-year-old tradition is consciously renewed.

Introduction

This chapter presents some results of my habilitation thesis (Pankau 2021) which deals with the ceremonial wagons of the Late Bronze Age in Europe. These are four-wheeled, horse-drawn wagons decorated with bronze fittings, and these fittings usually are the only remains of the wagons in the archaeological record. The wagons represent an innovation that is closely linked with the Urnfield ideology or religion that emerged around 1300 BC. Their function is unanimously seen as being, as the name suggests, ceremonial and ritual, which can include both sacred and profane actions and symbolism. They appear in southeastern, central, western and northern Europe between the 13th and 9th centuries BC. These five centuries are referred to in this paper as the Late Bronze Age.

https://doi.org/10.2369/9783869354439.beyond-urnfields

Due to the continuities in many types of wagon bronze fittings up to the Hallstatt period, it is quite reasonable to assume that the Late Bronze Age ceremonial wagons are fundamentally similar to those of the Hallstatt period. This includes their four-wheeled nature and the assumption of flat wagon boxes. In fact, however, it is seldom the case that there is any evidence at all for the number of wheels belonging to the wagon.

An essential part of research was to collect and sort the great variety of bronze objects which can be associated with the wagon or the horse team, and to date and interpret them also in functional terms. There are only few unambiguous examples of wagon bronzes, and far more examples where the association with horse and wagon is rather vague. Only find complexes containing either parts of the wagon itself or parts of the yoke were taken into account. Find complexes containing only general bridle or harness parts such as cheek-pieces, bits, strap-distributors or phalerae were not included. Accordingly, no horse burials were included. The decisive factor for inclusion was whether the wagon itself or the yoke was materially represented in a find complex, but not the team alone. In total, the catalogue of sites includes 339 find complexes containing wagon bronzes, as well as individual finds without context. Models and illustrations of wagons and wheels were used for interpretative purposes, but not systematically collected. They can contribute valuable information on the construction, appearance, use and symbolic meaning of the real wagons.

The evaluation of find contexts of wagon bronzes shows a clear predominance of hoards (Fig. 1). Funerary contexts are much rarer. To a significant extent, wagon graves only occur in the early Urnfield Hart an der Alz group, which is mainly centred in southern Bavaria (see below). Finds from settlements are hardly represented at all, with the exception of the rather high number of wagon bronzes that were found in the area of pile dwellings in Switzerland. They should surely not be interpreted as normal settlement remains, but as votive offerings or grave goods from 'burials in a wet environment'.

As they are so rare and heterogeneous, late Bronze Age wagon bronzes are not a very rewarding material for a detailed chronological study, so I only sorted them into three broad chronological phases: early phase = BzD–HaA1, (Montelius') Period III; middle phase = HaA2–B1, Period IV; late phase = HaB3, Period V. Not all find complexes could be limited to one of the three phases. As depicted (Fig. 2), wagon bronzes are quite strongly represented in the early phase, are then getting less abundant in the middle phase, and are by far the most common in the late phase.

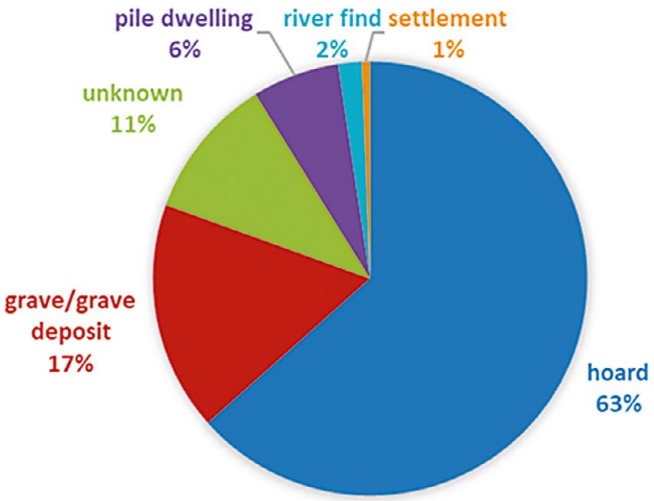


Fig. 1. Percentages of the site categories in which wagon bronzes of the Late Bronze Age were found.

https://doi.org/10.2369/9783869354439.beyond-urnfields

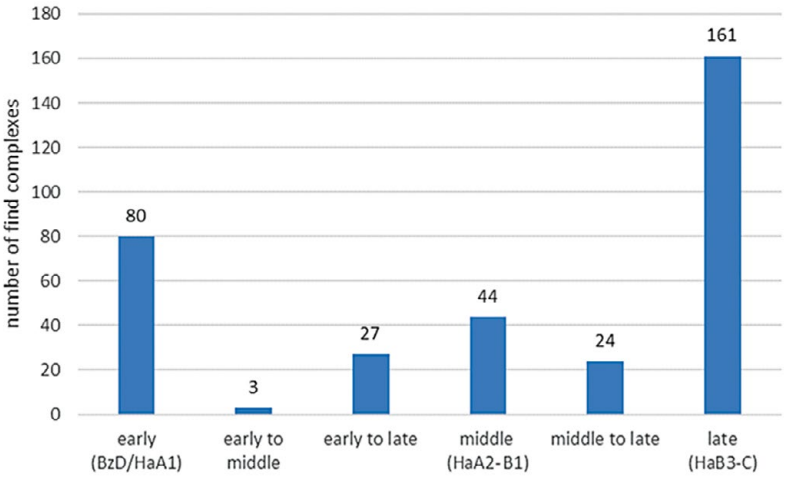


Fig. 2. Chronological classification of the find complexes with wagon bronzes of the Late Bronze Age in Europe (n = 339).

Spread and distribution of wagon bronzes in Europe

The overall distribution area of the wagon bronzes extends from the Carpathian Basin to Wales, and from southern Sweden to the French Mediterranean coast (Fig. 3). There is no evidence from Norway, Ireland, the Iberian Peninsula, the Balkans, eastern Europe and – with one exception – Italy. The distribution area is obviously bound to certain cultural groups in exchange with each other – that is the entire area of the Urnfield culture including its neighbours in the Carpathian Basin, as well as parts of the Nordic and Atlantic Bronze Age cultures. A sort of 'empty corridor' exists between the distribution area of the Urnfield culture and the Nordic Bronze Age. Ceremonial wagons thus seem to have been neither built nor used during the Late Bronze Age in the zone extending from the distribution area of the Lusatian culture to that of the *Niederrheinische Grabhügelkultur*, i.e. in the area of the (northern) low mountain range, and the north German and Polish Plain as well as the Lower Rhine Basin. It should be noted, however, that many areas of this zone in the Late Bronze Age are characterised by a general lack of metals, compared at least with the areas to the north and south of it. It is possible that the ceremonial wagon was used, but did not enter the ground. At least it seems certain that ceremonial wagons or parts of them passed through this 'transit area', since the Danish wagon finds from Skjerne (Gundslev sn., Maribo Amt), Egemose (Jordløse, Svendborg Amt; for both see Jacob-Friesen 1969) and from the Lusehøj (Voldtofte, Odense Amt; Thrane 1984) must probably be interpreted as southern imports.

In the early phase, wagon bronzes only appear in the Carpathian Basin and in the southern part of central Europe. Most striking are the elite cremation burials of the Hart an der Alz group which contain many bronze fittings of wagons, parts of harness and bridle for two horses, and sometimes also weapons and many vessels. 'Real' ceremonial wagons probably did not reach the north in that early phase, but we see them appear in rock art from Period III on. Johannsen (2010, 176–177) distinguishes three different types of four-wheeled wagons in later Nordic Bronze Age rock art. Type 3 has spoked wheels and is associated with the ceremonial wagons of the Urnfield and Hallstatt periods; it has been depicted since Period III. Its first appearance thus corresponds with the occurence of the Hart an der Alz group in central Europe. Also, all three cauldron wagons originating from the territory of the Nordic Bronze Age (Skallerup, Ystad/Hedskoga, Peckatel; see Kaul 2001, 473–475) are probably to be dated to Period III and thus bear witness to the apparently great radiance of the new religious ideas from the south.

https://doi.org/10.2369/9783869354439.beyond-urnfields

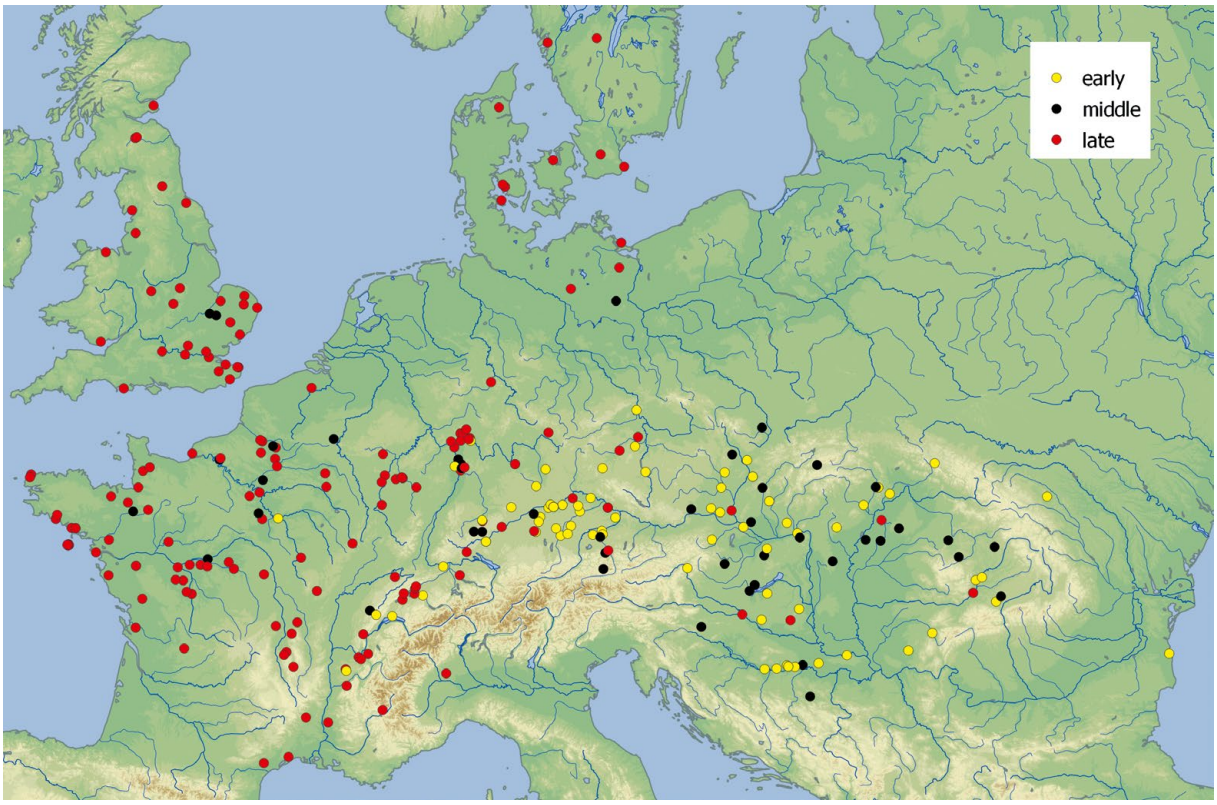


Fig. 3. Distribution map of sites with wagon bronzes in Late Bronze Age Europe, which can be narrowed down chronologically to the early, middle or late phase. See Pankau 2021 *for documentation of the single sites (graphics C. Pankau; physical background map compiled by David Knoll, using CGIAR SRTM and Natural Earth Data).*

In the middle phase, we see a shift to the west, and, if we include the find complexes that cannot be limited to the middle phase, also a little bit to the north, and to the region of the pile dwellings in Switzerland. The similarities between the hand-rails and the bronze tubes which might have decorated the railing of wagon-boxes from Egemose, Autavaux (Kt. Freiburg) and Chevroux (Kt. Waadt) have long been noticed (see Jacob-Friesen 1969, 143–145). The finds from Egemose and Skjerne are very probably imports from Switzerland. They clearly show the cultural influence from the south, but they do not prove a real adoption of the underlying religious ideas. Maybe we should rather see them in a political context, as some kind of gift.

In the late phase, wagon bronzes are particularly concentrated in France and England. There are now also more find complexes, mostly hoards, in the Nordic area, but these are widely spread and not nearly as densely represented as those in France and England. These hoards must be considered in the context of the large group of Ückeritz-type hoards of the younger Nordic Bronze Age, especially those of Period V, in Scandinavia and the southern Baltic Sea region, which comprise the most complete ensembles of harness and bridle known in the late Bronze Age of Europe (cf. for example Sprockhoff 1956, 254–270; Von Brunn 1980; Larsson 1975). An original Nordic expression of horse teams appears in these hoards, which differs from the one represented by the somewhat older find complexes of Egemose and Skjerne. Wagon parts were missing so far, but the hoard of Bækkedal (Sarauw 2016), discovered in 2014, has changed this, as it contained a horned animal socket which shows clear references to the horned bird's head socket from Skjerne.

Phalerae occur very frequently in the hoards of type Ückeritz; other typical components are rattle pendants, tin rolls and rings. Cheek-pieces, on the other hand, are quite rare, bits even rarer. Despite

https://doi.org/10.2369/9783869354439.beyond-urnfields

the overarching similarities, the individual features of the hoards and their components are also emphasised (Sarauw 2016, 4, 14).

Another interesting type contained in quite a lot of these hoards are the terrets and yoke attachements of type Ückeritz-Stolzenburg (cf. Lampe 1982, 37; Trachsel 2004, 440). They do not look all the same, but some of them have a ring in the middle, containing a little sculpture of what seems to be a vessel – which might be interpreted as a reminiscence of the old Urnfield symbolism of vessel, wagon, sun, and horse. If this interpretation is correct, some religious ideas connected with the ceremonial wagon of the Late Bronze Age might have been adopted in the north, and re-introduced to the south at the end of the Late Bronze Age (Milcent 2015, fig. 3.15,1; Chvojka et al. 2017, tab. 144.8).

All in all, wagon bronzes in the north are to be regarded as a marginal phenomenon. There are only a few widely scattered find complexes, several of which contain objects that can only be doubtfully connected to a wagon. The real wagon thus remains elusive in the north, unlike the team with its harness.

If we look at the distribution of wagon bronzes as a whole in a chronologically differentiated manner, a clear direction of spread from east to west can be established (Fig. 3). At the beginning of BzD, the ceremonial wagon appears rather abruptly in the Carpathian Basin and in southern central Europe. Only from the middle phase onwards it spreads a little into the areas of the Atlantic and Nordic Bronze Ages, certainly within a framework of pre-existing cultural relations between these areas. In the late phase, i.e. at the end of the Late Bronze Age, the focus of wagon bronzes is then clearly in western Europe. This has to do with the fact that most wagon bronzes were found in hoards. The increase in hoarding during the Late Bronze Age in Europe can also be described as a quasi wave-like, time-delayed spread from the southeast to the northwest. While in the Carpathian Basin and in southern Germany the peak was already reached in the early Urnfield period (cf. Hansen 1994, 306; Falkenstein 2011, 84–85), this happened in western Europe only in the late Urnfield period (Huth 2008, 140).

This time-delayed spread of the hoarding customs' peak is probably also partly responsible for the decline in wagon bronzes in the middle and late Urnfield period: Due to the fact that the number of hoards in the former distribution area of the wagon bronzes, i.e. in southern and eastern central Europe as well as in the Carpathian Basin, decreases in the middle phase, there are fewer possibilities for the wagon bronzes to be preserved in the archaeological record. At the same time, the decline of the Hart an der Alz group shows that the custom of wagon burials did not continue. The lower occurrence of wagon bronzes in the middle phase compared to the early and late phases could therefore be explained purely by the poorer preservation conditions. However, it is also possible that ceremonial wagons were generally less common in the middle phase.

From a typological point of view, the Hallstatt ceremonial wagon seems to represent a continuation of the western European wagon-building tradition of the late phase, in addition to influences from central Italy (Milcent/Leroy 2003, 227). According to Pare (2006, 60), the oldest evidence for Hallstatt period wagon graves comes from central Bohemia, Upper Austria, Bavaria, and the Swabian Alb. In the Late Hallstatt period, the wagon burial custom spread westwards to the Middle Rhine and to western France. At a first glance, it does not quite fit that the ceremonial wagons of early HaC are supposed to continue the western European wagon-building tradition of the Late Bronze Age, as spatially they occur comparatively far away from it. In fact, this apparent contradiction might rather illustrate that the concept of the wagon grave had by no means fallen into oblivion in its former early Urnfield main distribution area in southern Bavaria, but was just no longer practised to the same extent. In any case, the late Urnfield wagon graves of Künzing (Lkr. [German: *Landkreis* = district, county] Deggendorf, see Deicke 2011, 14–53) and Pfullingen (Lkr. Reutlingen, see Clausing 1997) prove that the earliest Hallstatt wagon, found at Wehringen (Lkr. Augsburg, see Pare 1992, 315–317), surely had a local cultural substrate.

https://doi.org/10.2369/9783869354439.beyond-urnfields

The influence from the Atlantic Bronze Age is already clearly evident in the typological composition of the HaB3-period hoards found in western Germany, especially in the Rhine-Main area (Jockenhövel 1972; Huth 2011, 56, fig. 10). At the same time, increasing contacts with the Nordic Bronze Age can be observed for the western Urnfield culture (Thrane 1975, 261; Brandherm 2015, 206). All in all, close mutual contacts between the Nordic Bronze Age, southern central Europe, especially the pile dwelling area, and the Atlantic Bronze Age can be deduced from the find material for the time period 'HaB3/Period V/Horizon of the Carp's Tongue Swords/Bronze final III recent' (cf. Sprockhoff 1951; Hundt 1978; Milcent 2019). Koch (2013, 138) even speaks of an 'atlantisation' of the northern Alpine elites. Thus, a relatively complicated history of the spread of the Late Bronze Age ceremonial wagon becomes apparent, the main direction of which ran from east to west and north for a long time before it reversed again at the end of the Late Bronze Age.

The early Urnfield period wagon burials of the Hart an der Alz group

Due to their comparatively good and complete preservation in burial contexts, the wagon findings of the Hart an der Alz group of the early Urnfield period (BzD/HaA1) play a decisive role for the interpretation of the ceremonial wagon phenomenon. The mortuary practices associated with them will therefore be examined in more detail in the following.

The definition of the group goes back to Christopher Pare, who summarised 13 sites under this name in his 1987 paper (Pare 1987, 38–46). Since then, this number has expanded considerably, partly due to new finds, partly due to older finds whose assignment to the Hart an der Alz group was originally rather vaguely based on single and/or unspecific wagon bronzes (cf. Pankau 2013a). For the sake of clarity, it makes sense to specify the definition of this group and to limit it to the graves and grave deposits mapped in Figure 4. Only in these find complexes the contexts and the quantity and diversity of the wagon bronzes contained indicate that the wagon as a whole or a bigger part of it (like the wagon box or the wheels) was deposited deliberately in or nearby a grave. It should be noted though that the find complexes from Münchsmünster 2, Zuchering, grave 192, Zuchering, 'grave' 507, Zuchering, 'grave' 63A, Zuchering, 'grave' 520, and Zuchering, grave 505, each contained only a few and uncertain wagon bronzes and for this reason would not be counted on their own into this group. However, since they lie in the vicinity of find complexes that can clearly be assigned to this group, they are treated here as well. Classical hoard finds such as Winklsaß (Lkr. Landshut), Rýdeč (okr. Ústí nad Labem), Reventin-Vaugris (Dép. Isère) and Publy (Dép. Jura), which contained only a few wagon bronzes, on the other hand, should not be included. Also graves like those of Großmugl (Bez. Korneuburg), Brandgrab E, and Mühlheim-Lämmerspiel (Kr. Offenbach am Main) or the one from the Lorsch Forest (Lkr. Bergstraße) should not be counted as part of the actual Hart an der Alz group, even if they contain single wagon bronzes which belong to the typical find spectrum of this group. Thus I now propose a narrower definition of this group than advocated in my 2013 article (see Pankau 2013a, also for references for the find complexes mentioned above).

Those individuals buried in the wagon graves – they were all cremated – are generally assigned the highest rank within the social structure of the Urnfield period, which is usually thought of as hierarchical. This is justified both by the rich grave goods, such as weapons, wagons, extensive sets of bronze or ceramic vessels, gold objects, symbols and signs with religious connotations, and by the sometimes striking grave forms (stone cists; cf. for example Schütz-Tillmann 1997, 43; Winghart 1999, 515–517; Clausing 2005, 88, 130; Kreutle 2007, 362–364, 404–405). Considering the local embedding of the find complexes of the Hart an der Alz group, the normal case is certainly the location in or not far from a contemporaneous burial ground. The 'wagon drivers' were therefore not buried in separate places, but very probably in the cemetery of the social community to which they had belonged during their lifetime.

https://doi.org/10.2369/9783869354439.beyond-urnfields

The sites of the Hart an der Alz group are distributed over a wide area from the northern foothills of the eastern Alps to those of the western Alps (Fig. 4). There is a clear concentration of sites in southern Bavaria. From here, looking west/southwest, the distribution continues via the three find complexes of Königsbronn and Mengen (1905 and 1955) in Württemberg to the three Swiss sites of Kaisten, Bern-Kirchenfeld, and St. Sulpice, although with significantly greater distances between the individual sites than in southern Bavaria.

Of the find complexes of the Hart an der Alz group, seven are more or less securely addressed as graves (Essenbach; Hart an der Alz; Mengen 1955; Poing; Zuchering, grave 192; Zuchering, grave 505; Sulzrain), eight are classified as grave deposits (Bergen; Münchsmünster 1; Münchsmünster 2; Oberottmarshausen; Zuchering, Kreisgraben [circular ditch] 54; Zuchering, 'grave' 507; Zuchering, 'grave' 63A; Zuchering, 'grave' 520), and a further eight as 'grave or grave deposit' (Bern-Kirchenfeld; Bruck; Hader; Kaisten; Königsbronn; Mengen 1905; St. Sulpice; Staudach).

Cornelia Schütz-Tillmann defined a grave deposit (on the basis of four features from the large urnfield of Zuchering and the site of Münchsmünster 1) as an indicator of a high social rank of the deceased that is detached from a grave, but in a figurative sense still has to be considered part of the grave itself (Schütz-Tillmann 1997, 21–23). This new site category was accepted by the majority of researchers (see e.g. Vosteen 1999, 52; Pare 2004, 358 note 3; Eggert 2001, 65–67). The difference to the much older concept of 'grave or funerary treasures', defined, among others, by Hans-Jürgen

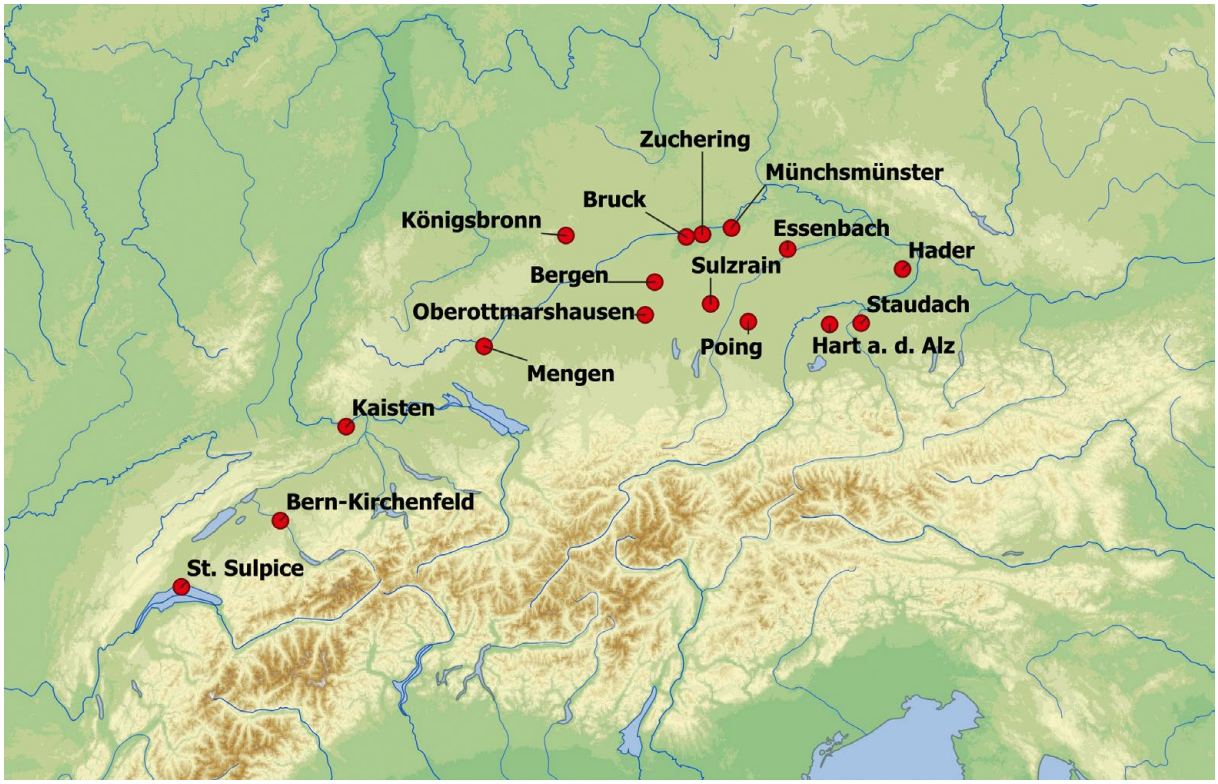


Fig. 4. Distribution map of the sites of the Hart an der Alz group (graphics C. Pankau, with information on: after – Bergen [Lkr. Aichach-Friedberg]: unpublished; Bern-Kirchenfeld [Kt. Bern]: Bolliger Schreyer/Müller 2012; Bruck [Stadt Neuburg a. d. Donau, Fundstelle 5]: Eckstein 1963; Essenbach [Lkr. Landshut]: Koch/Richter 2012; Hader [Lkr. Passau]: Pätzold/Uenze 1963; Hart an der Alz [Lkr. Altötting]; Müller-Karpe 1956; Kaisten [Kt. Aargau]: Pankau 2018; Königsbronn [Lkr. Heidenheim]: Pankau 2013b; Mengen [Lkr. Sigmaringen], two find complexes from years 1905 and 1955: Kreutle 2007, 564–568; Münchsmünster [Lkr. Pfaffenhofen a. d. Ilm], two find complexes: Schütz-Tillmann 1997; Oberottmarshausen [Lkr. Augsburg]: Büttner et al. 2007; Poing [Lkr. Ebersberg]: Winghart 1999; St. Sulpice [Kt. Waadt]: Fischer 1997, 189; Staudach [Bez. Braunau am Inn]: Zu Erbach 1986, 273–277; 1989, 161–165; Sulzrain [Lkr. Dachau]: unpublished; Zuchering [Stadt Ingolstadt], six find complexes: Schütz 2006, 90–91, 157–159, 209–210, 318–322, 327–328).

https://doi.org/10.2369/9783869354439.beyond-urnfields

Hundt (Hundt 1955) and Ekkehard Aner (Aner 1956),[1] is that the latter are hoards that are interpreted as furnishings for the afterlife and have no spatial reference to the grave of the person for whom the furnishings are intended. Furthermore, not every hoard that comes to light in the area of a contemporaneous cemetery[2] can automatically be described as a grave deposit, because it does not necessarily have anything to do with a specific grave. Another example of the complex phenomenon of deposits 'with funeral context' is grave 2 at Behringersdorf (Lkr. Nürnberger Land), where, according to Clausing (2005, 123), a ceramic vessel filled with burnt and damaged jewellery was placed upright in the uppermost stone package layer like a 'deposit in the grave'. Clausing considers whether the vessel, which was obviously added later, was a deposit of a ritual nature that was related to the buried persons (ibid.).

The fact that grave goods are not placed in the grave itself but deliberately deposited outside of it, though still in the area of the burial ground, is a phenomenon that is also known from other cremation burial periods and cultural areas. Augstein et al. (2020, 61) suggest the following three possible interpretations for such finds:

1. They are graves with an external placement of grave goods where the urn has already been completely ploughed away.
2. They are deposits with funeral character, representative of a grave in the sense of a burial of an individual.
3. The deposits have an autonomous meaning that does not directly refer to concrete graves or individuals.

The first interpretation comes quite close to the concept of a grave deposit according to Schütz-Tillmann (1997), the second case can be described as a cenotaph, the third one as a hoard in a burial ground.

In the following, I will examine whether these categories are helpful in interpreting the grave-like deposits of wagon bronzes.

The eight finds that can be reliably interpreted as grave deposits (four from the urnfield of Zuchering, Münchsmünster 1 and 2, Bergen, Oberottmarshausen) are characterised by an irregular packing of various bronze objects in a small space, with bronze fittings stemming from wagon and/or team dominating in each case. An exception is the find complex from Münchsmünster 2, which contains very individual objects to which hardly any parallels are known and which therefore cannot be reliably identified as wagon parts. With the exception of the finds from Münchsmünster 1–2, all the grave deposits mentioned lie within a contemporaneous cemetery.

The sites of Königsbronn, St. Sulpice, Bern-Kirchenfeld, Staudach, Bruck, Mengen 1905, Hader, and Kaisten might also be regarded as grave deposits. Arguments in favour of this are the lack of human bones and ashes, the (partly only presumed) location in a contemporaneous cemetery or, in the case of Mengen 1905, the proximity to the grave of Mengen 1955, as well as the typological composition of the find complexes (predominantly wagon parts and horse harness elements). The latter argument in particular, however, should be viewed with caution, since the find complexes from Bruck and Mengen 1905, presumably also that from Kaisten, are only partly preserved. The find complex from Königsbronn, on the other hand, in comparison contains many other object categories and might therefore rather represent a grave. In the sense of the above-mentioned variants of interpretation by Augstein et al. (2020) the second possibility, the deposit with funeral character, which is representative of a grave, could be suitable here.

1 G. Tarbay (2019) has convincingly refined the concept of funerary treasures on the basis of Late Bronze Age hoards from Transdanubia and beyond.

2 On this phenomeon, see for example Sprockhoff 1956, 3–4; Falkenstein 2011, 89–90.

https://doi.org/10.2369/9783869354439.beyond-urnfields

The astonishingly high number of six roughly contemporaneous wagon find complexes in the urnfield of Zuchering is put into perspective if one assumes, as suggested by Schütz (2006, 31–32), that there are pairs of grave deposits and graves belonging to each other. An assignment in the sense of grave deposit – grave is also possible for the find complexes from Mengen 1905 and 1955. Here, however, the problem arises that there would be too many cheek-pieces for only one team, because in Mengen 1955 there are already four and in Mengen 1905 one more. On the other hand, the analysis of the typological composition shows that in Mengen 1905 mainly components of the wheels are included, in Mengen 1955 mainly fittings of the wagon box, which can certainly be interpreted in the sense that both find complexes contained bronzes of the same wagon. It is therefore conceivable that Mengen 1955 is the actual burial, and Mengen 1905 represents the associated grave deposit.

For the early Urnfield (BzD/HaA1) burials of Zuchering, Schütz-Tillmann (1997, 22–23, 25) describes a development ranging from an almost unsorted distribution of bronze objects to the concentration of the 'better' parts in a corner of the grave pit to the removal of the well-preserved weapons, wagon and harness parts, i.e. the rank insignia, and their deposition separated from the grave in the form of a grave deposit. The same pattern – a concentration of burnt wagon and harness bronzes, partly together with weapons, in a densely packed heap within the grave, while the remaining bronzes were deposited on the cremated remains or in other places – can also be observed in the grave of Poing as well as in the disturbed graves of Mengen 1955 and Hart an der Alz. The fourth grave to be added is the one from Essenbach, where the wagon and harness bronzes as well as the sword were also deposited together in the eastern corner of the burial chamber in a dense package (Koch/Richter 2012, 41).

If it is true that the burial rites outlined are in a chronological sequence, then the grave deposits should be slightly younger than the actual graves of the Hart an der Alz group. Schütz (2006, 31) also provides a possible explanation for this development; she suspects a causal connection between the grave deposits and new religious rules of the Urnfield period, according to which the extent of grave furnishings had to be greatly reduced.

A relationship between grave and associated grave deposit can also be assumed for some find complexes outside the Urnfield culture. The two rich graves AO and GX in the Lusehøj possibly represent just two separate deposits of the cremated remains and the grave goods of one and the same person, whereby wagon parts were only contained in grave GX. In addition, there is the find complex from Egemose, only a few kilometres away from the Lusehøj, which might possibly represent another deposit of parts of the same wagon. This fits in with the fact that the finds from Egemose also show traces of burning. A similar connection could exist between the hoard from Onzain (Dép. Loir-et-Cher, see Milcent/Leroy 2003), which contained nothing else but wagon bronzes, among them a very big yoke attachement of type Ückeritz-Stolzenburg with a huge vessel-shaped sculpture in the centre, and the Bronze Final IIIb-cremation burial from Sublaines (Dép. Indre-et-Loire, see Cordier 2009, 531–538, figs. 423–426, 428.5) in France with its magnificent ceramic vessel decorated with wagon depictions. In this case the two sites are already 27 km apart. A possible explanation for this distance is provided by Milcent/Leroy (2003, 226) with the suggestion that this could reflect the territory over which the buried person associated with the wagon once exercised control. Both find complexes emphasise the close iconographic relationship between wagon and vessel, already apparent in the cauldron wagons of the early Urnfield period (see above). The professionally excavated burial mound from Sublaines contained only the vessel described by Cordier (2009, 531) as an urn, which apparently was filled with cremated remains. This 'emptiness' indeed suggests that the 'missing' equipment of the buried person should be sought in the hoards of the surrounding area.

As an interim conclusion, it should be noted that the separation of some grave goods, including wagon and harness bronzes, within the grave pit or their deposition outside of it is a typical phenomenon for the wagon find complexes of the Hart an der Alz group. However, similar phenomena are

https://doi.org/10.2369/9783869354439.beyond-urnfields

also known from other chronological and cultural contexts. The intentions behind them cannot be deciphered on the basis of archaeological sources alone; however, in the case of the Hart an der Alz group, it is clear that the wagon parts in particular received such a prominent treatment.

In order to gain deeper insight into the rituals associated with the burial, the find complexes of the Hart an der Alz group were also examined with regard to traces of burning and deliberate mechanical destruction that could be detected on the preserved objects. It can be noted that traces of fire occur regularly. However, there are clear differences in the quantity and type of objects affected by fire as well as their degree of burning. The spectrum ranges from find complexes such as Hart an der Alz and Münchsmünster 1, where all or by far the majority of bronze objects have traces of burning, to others such as Königsbronn, Oberottmarshausen and Hader, which have only a certain proportion of burnt objects, to further ones such as Staudach, St. Sulpice, and Bruck, where only very few objects are influenced by fire. In the case of St. Sulpice and Bruck, however, it must be taken into account that these find complexes have certainly not survived completely.

In the find complex from Königsbronn, the ratio of burnt to unburnt objects partly suggests a deliberate selection or a *pars pro toto* burning,[3] since here, for example, one of two cheek-pieces and one of two bits are burnt, as well as three of five phalerae. Furthermore, one spiral disk (of a set of two) is preserved, the other broken to pieces. In Essenbach, one of the two horn-shaped sockets is very well preserved, the other one severely crushed. This list could be continued.

According to Norbert Wiesner, pairs of objects which are destroyed in a differentiated manner by mechanical and/or thermal action are not uncommon especially in the early and middle Urnfield period (Wiesner 2009, 442–446). This custom of deliberate unequal treatment of grave goods of the same type occurs regionally limited and differs in detail. Gräslund's (1994, 16) general statement, that 'prehistoric people' normally avoided laying down unburnt prestige goods in cremation graves, can therefore not be confirmed here.

The deliberate deformation of grave goods is not unusual in BzD; on the contrary, it can be regarded as a typical feature that is often linked to the cremation burial rite (cf. in detail Wiesner 2009, 437–448; see also Nebelsick 1997, 40; Fischer 1998, 317; Louwen 2021, 143–148, 235–236). It may have been carried out both before and after cremation. According to Vosteen (1999, 164), the regularly occurring mechanical damage to the bronze objects in Urnfield culture graves indicates that the entrance of the deceased into the world beyond was only secured if corresponding actions were carried out. Manfred Eggert also regards the intentional damage or destruction of deposited objects as a criterion for ritual activities (Eggert 2015, 266–267 fig. 5).

It can be concluded that either the wagon itself, or only its fittings, usually ended up on the funeral pyre. The fact that the dead person(s) was (were) burnt lying on the wagon can only be proven with certainty for Hart an der Alz due to cremated remains sticking to the wagon bronzes. The burnt bronze fittings were then collected and deposited in dense packs in the grave or in the vicinity, sometimes together with other unburnt wagon parts as well as other bronze objects. This sequence can be deduced from the descriptions of the well-documented graves of Essenbach, Hart an der Alz, Mengen 1955, and Poing as well as the grave deposits of Münchsmünster 1, Oberottmarshausen, and Zuchering, Kreisgraben (circular ditch) 54.

The fact that the wagon bronzes were often burnt only in parts, as well as their partial mechanical destruction, which apparently took place before the burning, indicate that at least these fittings must have been deliberately dismantled from the wagon before its burning. The question arises whether this does not apply to all wagon bronzes, i.e. whether the wooden wagon may not have been placed

3 On the *pars pro toto* aspect of the Urnfield burial custom in general, see Wiesner 2009, 521. Specifically on the topic of the only partial co-incineration of grave goods: Zuber 2018, 23.

https://doi.org/10.2369/9783869354439.beyond-urnfields

on the pyre or in the grave at all, but only its fittings or a part of them, as a *pars pro toto* for the whole wagon.[4]

In summary, it can be stated that the graves and grave deposits of the Hart an der Alz group were probably established for representatives (men, women, children) of an elite social class who had supra-regional connections and had fully adapted the new burial rites of the incipient Urnfield culture. Whether a group of people can be identified here who promoted the implementation of new religious ideas, and what role the ceremonial wagon might have played in this, will be discussed in the following section.

The ceremonial wagon of the Late Bronze Age: Stage and spectacle

To witness the driving around of a ceremonial wagon certainly was a spectacle, considering all the messages transported by the horses, the sun and waterfowl symbolism, and all the ringing pendants fixed on team and wagon. The elite incineration graves of the Hart an der Alz group actually contained all the elements that are characteristic for the new 'Urnfield religion': cremation, with the remains to be interred in flat graves, waterfowl and sun iconography, wagons, horses and vessels, and horn/cattle/moon symbolism.

The purpose of the flat wagon boxes, both in the Hallstatt period and in the Late Bronze Age, was probably to make the people or objects travelling or being transported on the wagon clearly visible to all spectators – to put them in the limelight. This is deduced because a flat wagon box is not practical for transport – the goods to be transported can hardly be stacked, and they fall out more easily when the journey is bumpy than with a deep wagon box. So a flat wagon box resembles more a stage than a container. This in turn fits with the new burial rite of the Urnfield culture, which has a spectacle character regarding the burning of the body on a funeral pyre. Overall, in the burial ritual of the Urnfield culture there is more emphasis on the funeral process itself, which is likely to have been understood as a transformation of the dead, than on the creation of an impressive funerary monument, as expressed in the Middle Bronze Age burial mound with inhumations.

For Stefan Wirth, the symbolism of the *Vogelsonnenbarke* ultimately contains the hope of immortality (Wirth 2010, 508–512). At the same time, he sees it as a symbol of the sovereign iconography of a warlike culture. These aspects could explain the rapid spread of the new religion. The people buried in the elite graves of the Hart an der Alz group can be imagined as protagonists in this process, namely by linking essential elements of the new religion (cremation burial, water bird symbolism, horse-drawn ceremonial wagon) with traditional status symbols (weapons, jewellery) in the grave.[5] Through this staging, they integrated the old values and the new faith, thus pulling 'the common people' along. Sperber (1999, 654–655) and Falkenstein (2017) have already described this process in a very similar way. The origin of at least some of the new religious elements can probably be traced downstream from the Danube. According to Falkenstein (2017, 84–85), the cremation rite was adopted from the central Danube region, and Winghart (1999, 531–532) sees the special furnishings of the northern Alpine wagon graves and the grave deposits as a direct adoption of east-central European depositional rites into the traditional burial ritual of the western Tumulus culture.

4 See a similar argument in Clausing (1997, 578–579), Fischer (1998, 317–318) and Schauer (2008, 28). It is equally possible that some of the bronzes were not recovered from the pyre remains (Schütz-Tillmann 1997, 41). Deicke (2011, 119), on the other hand, suggests a positioning close to, but not on, the pyre itself for the sword from tomb B as well as the wagon and horse harness from tomb A of Künzing, since these objects were only partially exposed to fire.

5 Falkenstein (2017, 83) aptly writes of a syncretic combination of elements of inhumation and cremation graves.

https://doi.org/10.2369/9783869354439.beyond-urnfields

Those buried in the wagon graves of the Hart an der Alz group can thus be understood as an avant-garde of the elite, the first to adopt the new religion with its symbols. Further 'milestones' in the adaptation of the new ideas of the afterlife would then be, on the one hand, the enforcement of the urn burial custom from HaA1 onwards (Falkenstein 2017, 89). On the other hand, Sperber (1999, 650–655) assumes a complete abandonment of graves in the area of the Rhenish-Swiss-French and Lower Mainish-Swabian groups of the Urnfield culture from HaB1 onwards, and suggests that the ashes of the dead were scattered in the rivers instead, as indicated by the increase in river finds.

The new iconography of the Urnfield culture features especially in the 'militant sphere' (cf. Ilon 2012; Kaiser 2014; Wirth 2021, 649–650). An essential difference between 'the' warrior of the Tumulus culture and 'that' of the Urnfield culture could thus be described as a tendency towards sacralisation or mythologisation of the latter. According to Müller-Karpe (1956, 73–74), the 'warrior of Hart an der Alz' represents the new belief of the Urnfield culture, which, among other things, enforced the idea of sacrifice to an extent unknown before. As evidence for this, he cites the birds, in which he sees the symbolic figures for the delivery of offerings to a deity and probably for the intercourse between man and God in general. The horse may also have played an important role in the new religion, which may have hardly differed from that of the water bird – possibly both were assigned the function of *psychopomp*, mediator between the worlds (Coimbra 2017). As proof of this, we can cite the images of the sun horse on the Nordic razors, some of which strongly resemble the water bird images, of course only as far as the head and neck area of the horse are concerned (see Kaul 2005, fig. 3). The same can be seen on the bits with horse-shaped cheek-pieces from Italy (cf. e.g. Von Hase 1969, Taf. A and Taf. 1–2). It is generally known that in the Late Bronze Age, both in the area of the Urnfield culture and in the Nordic Bronze Age, syncretic animal representations such as the *Vogelrind* (combining cattle with waterfowl imagery) or the horned horse are popular motifs.

The horse-drawn wagon with spoke wheels, which surely is to be read as a symbol for the sun, and decorated with waterfowl may thus have provided the ideal stage to propagate the new religious ideas. At least, this is probably what happened in BzD in southern Bavaria and further to the west, where the find complexes of the Hart an der Alz group came to light. The expiry of the wagon burial custom, and the simultaneous expansion of the ceremonial wagon into northern and western Europe, which can be observed from the middle phase on, may be a consequence of the 'consolidation' of the new religion. Propagation was no longer necessary, the new beliefs and practices had prevailed and were increasingly 'exported' in the course of existing cultural contacts. Spectacular wagon finds are now more likely outside the Urnfield culture, examples being the find complexes from Egemose and Onzain,[6] and the cast bronze wheels of the Coulon type (Pare 1987, 49–55; 1992, 30–33). The religious implications of the wagon were not necessarily fully adopted during that process, but surely adapted to the local communities' customs.

In the late phase, the core area of the ceremonial wagon had clearly shifted to western Europe, and from there it finally came back to the graves in southern central Europe in the form of the Hallstatt ceremonial wagons. This process should be seen against the background of the cultural changes from the Bronze to the Iron Age.

In graves A and F from Künzing, as well as those from Pfullingen (see above) and Steinkirchen (Lkr. Deggendorf), the revival of the wagon burial custom at the end of the Urnfield period in its former core area is already indicated. The explanation for this is usually given as the legitimation of new elites who, by referring to the ceremonial wagon, wanted to place themselves in a traditional narrative, but who, on the other hand, also presented themselves as particularly modern, among other

6 Both also show traces of fire and mechanical destruction, which is reminiscent of the typical treatment of grave goods in the Urnfield culture.

https://doi.org/10.2369/9783869354439.beyond-urnfields

things by using the new Thraco-Cimmerian bridle.[7] In HaC, the wagon becomes an integral part of many rich graves, and certainly this continued to be a conscious reference to a burial custom that had never been completely forgotten. Melanie Augstein has worked out in detail the various references to cultic practices of the Urnfield period that manifest themselves in some HaC-period wagon graves in Bavaria, including the *pars pro toto* custom, as well as the deliberate manipulation and fragmentation of grave goods (Augstein 2017). It is noteworthy that the ceremonial wagon in HaC also appears (at least allusively) in elite graves in the previously 'wagon-free' Netherlands (Wijchen, Oss) and in Belgium (Cour-St-Etienne; Schumann/Van der Vaart-Verschoof 2017). There, too, this happens in a strong Urnfield tradition, which is expressed, among other things, in the fragmentation of grave goods and the cremation rite (Van der Vaart-Verschoof 2017, 151–152).

Bibliography

Aner 1956: E. Aner, Hort und Grab. Offa 15, 1956, 31–42.

Augstein 2017: M. Augstein, 'Elite graves' in Bavaria. Considerations of practices, status and communication of early Hallstatt communities. In: R. Schumann/S. van der Vaart-Verschoof (eds.), Connecting Elites and Regions. Perspectives on contacts, relations and differentiation during the Early Iron Age Hallstatt C period in Northwest and Central Europe (Leiden 2017) 237–253.

Augstein et al. 2020: M. Augstein/F. Fuchs/H.-J. Karlsen/A. König, Deponierungen auf jüngereisen- und älterkaiserzeitlichen Urnengräberfeldern. In: H. Wendling/J. Fries-Knoblach/M. Augstein/S. Gentner/M. Kirchmayr/M. Kohle/K. Ludwig/R. Schumann/J. Wiethold (eds.), Objekt – Depot – Motiv. Beiträge zur Ur- und Frühgeschichte Mitteleuropas 95 (Langenweißbach 2020) 51–62.

Bolliger Schreyer/Müller 2012: S. Bolliger Schreyer/F. Müller, Das bronzezeitliche Wagengrab ante Portas – eine Spurensuche rund um den Berner Helvetiaplatz. In: A. Boschetti-Maradi/A. de Capitani/S. Hochuli/U. Niffeler (eds.), Form, Zeit und Raum. Antiqua 50 (Basel 2012) 159–168.

Brandherm 2015: D. Brandherm, Westliche Urnenfelderkultur. In: A.-M. Wittke (ed.), Frühgeschichte der Mittelmeerkulturen. Der neue Pauly: Supplemente 10 (Stuttgart 2015) 202–209.

Von Brunn 1980: W. A. Von Brunn, Eine Deutung spätbronzezeitlicher Hortfunde zwischen Elbe und Weichsel. Bericht der Römisch-Germanischen Kommission 61, 1980, 91–150.

Büttner et al. 2007: A. Büttner/R. Linke/S. Wirth, Reiche Gräber der Bronze- und Urnenfelderzeit und ein Depotfund mit Wagenbronzen von Oberottmarshausen, Landkreis Augsburg, Schwaben. Das archäologische Jahr in Bayern 2006, 2007, 53–56.

Chvojka et al. 2017: O. Chvojka/L. Jirán/M. Metlička, Nové české depoty doby bronzové. Episteme: Archaeologia (České Budějovice 2017).

Clausing 1997: C. Clausing, Ein späturnenfelderzeitlicher Grabfund mit Wagenbronzen von Pfullingen, Baden-Württemberg. Archäologisches Korrespondenzblatt 27, 1997, 567–582.

Clausing 2005: C. Clausing, Untersuchungen zu den urnenfelderzeitlichen Gräbern mit Waffenbeigaben vom Alpenkamm bis zur Südzone des Nordischen Kreises. Eine Analyse ihrer Grabinventare und Grabformen. BAR Int. Ser. 1375 (Oxford 2005).

Coimbra 2017: F. Coimbra, The Psychopomp Character of the Horse in Europe during Protohistory and the Roman Period. Arnava 6(1), 2017, 84–98.

Cordier 2009: G. Cordier, L'âge du bronze dans les pays de la Loire moyenne (Joué-lès-Tours 2009).

Deicke 2011: A. Deicke, Studien zu reich ausgestatteten Gräbern aus dem urnenfelderzeitlichen Gräberfeld von Künzing. Jahrbuch des RGZM 58(1), 2011 (2012), 1–188.

Deicke 2021: A. Deicke, Zwischen Individuum und communitas. Universitätsforschungen zur Prähistorischen Archäologie 358 (Bonn 2021).

Eckstein 1963: M. Eckstein, Flachgräber der frühen Urnenfelderkultur bei Bruck, Ldkr. Neuburg a. d. Donau. Germania 41, 1963, 77–84.

Eggert 2001: M. K. H. Eggert, Prähistorische Archäologie (Tübingen, Basel 2001).

Eggert 2015: M. K. H. Eggert, Das Rituelle als erkenntnistheoretisches Problem der Archäologie. In: T. L. Kienlin (ed.), Fremdheit – Perspektiven auf das Andere. Universitätsforschungen zur Prähistorischen Archäologie 264 (Bonn 2015) 255–278.

Zu Erbach 1986: M. Zu Erbach, Die spätbronze- und urnenfelderzeitlichen Funde aus Linz und Oberösterreich. Katalog. Linzer Archäologische Forschungen 15 (Linz 1986).

Zu Erbach 1989: M. Zu Erbach, Die spätbronze- und urnenfelderzeitlichen Funde aus Linz und Oberösterreich. Text. Linzer Archäologische Forschungen 17 (Linz 1989).

7 Cf. Vosteen 1999, 164; Metzner-Nebelsick 2003, 108. Deicke (2021, 230) sees a clear correlation between the influx of new status indicators from the east and the reactivation of the wagon grave as a local status symbol of the ruling elite.

https://doi.org/10.2369/9783869354439.beyond-urnfields

Falkenstein 2011: F. Falkenstein, Zu Struktur und Deutung älterurnenfelderzeitlicher Hortfunde im nordalpinen Raum. In: U. L. Dietz/A. Jockenhövel (eds.), Bronzen im Spannungsfeld zwischen praktischer Nutzung und symbolischer Bedeutung. Prähistorische Bronzefunde XX,13 (Stuttgart 2011) 71–105.

Falkenstein 2017: F. Falkenstein, Zum Wandel der Bestattungssitten von der Hügelgräber- zur Urnenfelderkultur in Süddeutschland. In: D. Brandherm/B. Nessel (eds.), Phasenübergänge und Umbrüche im bronzezeitlichen Europa. Universitätsforschungen zur Prähistorischen Archäologie 297 (Bonn 2017) 77–96.

Fischer 1997: C. Fischer, Innovation und Tradition in der Mittel- und Spätbronzezeit. Monographien der Kantonsarchäologie Zürich 28 (Zürich, Egg 1997).

Fischer 1998: C. Fischer, Symbolische Handlungen und Bestattungsbräuche in der Bronzezeit. In: S. Hochuli/U. Niffeler/V. Rychner (eds.), Bronzezeit. Die Schweiz vom Paläolithikum bis zum frühen Mittelalter 3 (Basel 1998) 309–326.

Gräslund 1994: B. Gräslund, Prehistoric Soul Beliefs in Northern Europe. Proceedings of the Prehistoric Society 60(1), 1994, 15–26.

Hansen 1994: S. Hansen, Studien zu den Metalldeponierungen während der älteren Urnenfelderzeit zwischen Rhônetal und Karpatenbecken. Universitätsforschungen zur Prähistorischen Archäologie 21 (Bonn 1994).

Von Hase 1969: F.-W. Von Hase, Die Trensen der Früheisenzeit in Italien. Prähistorische Bronzefunde XVI,1 (München 1969).

Hundt 1955: H.-J. Hundt, Versuch zur Deutung der Depotfunde der nordischen jüngeren Bronzezeit unter besonderer Berücksichtigung Mecklenburgs. Jahrbuch des RGZM 2, 1955, 95–140.

Hundt 1978: H.-J. Hundt, Die Rohstoffquellen des europäischen Nordens und ihr Einfluß auf die Entwicklung des nordischen Stils. Bonner Jahrbücher 178, 1978, 125–162.

Huth 2008: C. Huth, Horte als Geschichtsquelle. In: K. Schmotz (ed.), Vorträge des 26. Niederbayerischen Archäologentages (Rahden/Westf 2008) 131–162.

Huth 2011: C. Huth, Wasser zwischen den Welten – Überlegungen zum archäologischen Quellenwert einer bronzezeitlichen Flusslandschaft. Siedlungs- und Küstenforschung im südlichen Nordseegebiet 34, 2011, 47–57.

Ilon 2012: G. Ilon, Das Rad, die Sonne, der Wasservogel und die Vogelbarken auf spätbronzezeitlichen Schwertern … mögliche Ausdrucksformen des Handels oder anderer Beziehungen? In: L. Marta (ed.), The Gáva Culture in the Tisa Plain and Transylvania. Studii şi Comunicări/Seria Arheologie 28 (Satu Mare 2012) 169–210.

Jacob-Friesen 1969: G. Jacob-Friesen, Skjerne und Egemose. Wagenteile südlicher Provenienz in skandinavischen Funden. Acta Archaeologia (Kopenhagen) 40, 1969, 122–158.

Jockenhövel 1972: A. Jockenhövel, Westeuropäische Bronzen aus der späten Urnenfelderzeit in Südwestdeutschland. Archäologisches Korrespondenzblatt 2, 1972, 103–109.

Johannsen 2010: J. W. Johannsen, The wheeled vehicles of the Bronze Age on Scandinavian rock carvings. Acta Archaeologica (Kopenhagen) 81, 2010, 150–250.

Kaiser 2014: M. Kaiser, Vogelbarken auf urnenfelderzeitlichen Vollgriffschwertern. In: L. Deutscher/M. Kaiser/S. Wetzler (eds.), Das Schwert – Symbol und Waffe. Freiburger Archäologische Studien 7 (Rahden/Westf. 2014) 33–50.

Kaul 2001: F. Kaul, Kultwagen § 2. Scandinavia. In: H. Beck/D. Geuenich/H. Steuer (eds.), Reallexikon der Germanischen Altertumskunde 17 (Berlin, New York 2001) 470–478.

Kaul 2005: F. Kaul, Bronze Age tripartite cosmologies. Prähistorische Zeitschrift 80(2), 2005, 135–148.

Koch 2013: J. T. Koch, Out of the Flow and Ebb of the European Bronze Age: Heroes, Tertessos, and Celtic. In: J. T. Koch/B. Cunliffe (eds.), Celtic from the West 2. Celtic Studies Publications 16 (Oxford 2013) 101–146.

Koch/Richter 2012: H. Koch/T. Richter, Ein spätbronzezeitliches Wagengrab von Essenbach. Landkreis Landshut, Niederbayern. Das archäologische Jahr in Bayern 2011, 2012, 40–42.

Kreutle 2007: R. Kreutle, Die Urnenfelderkultur zwischen Schwarzwald und Iller. Arbeiten zur Archäologie Süddeutschlands 19 (Büchenbach 2007).

Lampe 1982: W. Lampe, Ückeritz. Ein jungbronzezeitlicher Hortfund von der Insel Usedom. Beiträge zur Ur- und Frühgeschichte der Bezirke Rostock, Schwerin und Neubrandenburg 15 (Berlin 1982).

Larsson 1975: L. Larsson, The Fogdarp Find. A Hoard From The Late Bronze Age. Meddelanden från Lunds universitets historiska museum 1973/74, 1975, 169–238.

Louwen 2021: A. Louwen, Breaking and making the ancestors. Piecing together the urnfield mortuary process in the Lower-Rhine-Basin, ca. 1300–400 BC (Leiden 2021).

Metzner-Nebelsick 2003: C. Metzner-Nebelsick, Ritual und Herrschaft. Zur Struktur von spätbronzezeitlichen Metallgefäßdepots zwischen Nord- und Südosteuropa. In: C. Metzner-Nebelsick (ed.), Rituale in der Vorgeschichte, Antike und Gegenwart. Internationale Archäologie / Arbeitsgemeinschaft Symposium Tagung Kongress 4 (Rahden 2003) 99–117.

Milcent 2015: P.-Y. Milcent, Bronze objects for Atlantic elites in France and beyond (thirteenth to eighth century BC). In: F. Hunter/I. Ralston (eds.), Scotland in Later Prehistoric Europe (Edinburgh 2015) 19–46.

Milcent 2019: P.-Y. Milcent, À la croisée des chemins: Le dépôt de Petit Villatte à Neuvy-sur-Barangeon (Cher). In: D. Cimorelli (ed.), Des offrandes pour les dieux? (Milano 2019) 140–143.

Milcent/Leroy 2003: P.-Y. Milcent/D. Leroy, Le dépôt à éléments de char du Bronze final d'Onzain (Loir-et-Cher, Centre, France): Présentation préliminaire. Jahrbuch des RGZM 50(1), 2003, 207–230.

Müller-Karpe 1956: H. Müller-Karpe, Das urnenfelderzeitliche Wagengrab von Hart a. d. Alz, Oberbayern. Bayerische Vorgeschichtsblätter 21, 1956, 46–75.

Nebelsick 1997: L. D. Nebelsick, Auf Biegen und Brechen. Ekstatische Elemente bronzezeitlicher Materialopfer –

https://doi.org/10.2369/9783869354439.beyond-urnfields

Ein Deutungsversuch. In: A. Hänsel/B. Hänsel (eds.), Gaben an die Götter. Bestandskatalog Museum für Vor- und Frühgeschichte Berlin 4 (Berlin 1997) 35–41.

Pankau 2013a: C. Pankau, Neue Forschungen zu den Wagengräbern der Hart an der Alz-Gruppe. In: L. Husty/K. Schmotz (eds.), Vorträge des 31. Niederbayerischen Archäologentages (Rahden/Westf. 2013) 113–147.

Pankau 2013b: C. Pankau, Das spätbronzezeitliche Wagengrab von Königsbronn (Lkr. Heidenheim). Jahrbuch des RGZM 60, 2013 (2015), 1–103.

Pankau 2018: Pankau, Die frühurnenfelderzeitlichen Wagen- und Zaumzeugbronzen von Kaisten AG. Jahrbuch Archäologie Schweiz 101, 2018, 103–144.

Pankau 2021: C. Pankau, Die Zeremonialwagen der späten Bronzezeit in Europa. Unpubl. habilitation dissertation, Goethe-Univ. (Frankfurt am Main 2021).

Pare 1987: C. F. E. Pare, Der Zeremonialwagen der Bronze- und Urnenfelderzeit. Seine Entstehung, Form und Verbreitung. In: Römisch-Germanisches Zentralmuseum (ed.), Vierrädrige Wagen der Hallstattzeit. Monographien des RGZM 12 (Mainz 1987) 25–67.

Pare 1992: C. F. E. Pare, Wagons and wagon-graves of the Early Iron Age in Central Europe (Oxford 1992).

Pare 2004: C. F. E. Pare, Die Wagen der Bronzezeit in Mitteleuropa. In: M. Fansa/S. Burmeister (ed.), Rad und Wagen. Der Ursprung einer Innovation. Beiheft der Archäologischen Mitteilungen aus Nordwestdeutschland 40 (Mainz 2004) 355–372.

Pare 2006: C. F. E. Pare, Wagen und Wagenbau, Wagengrab: § 1 Vorgeschichte, Allgemein, bis § 7: Jüngere Latènezeit. In: H. Beck/D. Geuenich/H. Steuer (eds.), Reallexikon der Germanischen Altertumskunde 33 (Berlin, New York 2006) 51–68.

Pätzold/Uenze 1963: J. Pätzold/H. P. Uenze, Vor- und Frühgeschichte im Landkreis Griesbach. Kataloge der Bayerischen Staatssammlung München 6 (Kallmünz 1963).

Sarauw 2016: T. Sarauw, The Late Bronze Age hoard from Bækkedal, Denmark – new evidence for the use of two-horse teams and bridles. Danish Journal of Archaeology 4(1), 2016, 3–20.

Schauer 2008: P. Schauer, Bronzezeitliche Mythenbilder. In: P. Schauer (ed.), Festgabe 40 Jahre Lehrstuhl für Vor- und Frühgeschichte der Universität Regensburg 1968–2008. Regensburger Beiträge zur Prähistorischen Archäologie 20 (Regensburg 2008) 23–69.

Schumann/Van der Vaart-Verschoof 2017: R. Schumann/S. Van der Vaart-Verschoof (eds.), Connecting Elites and Regions (Leiden 2017).

Schütz 2006: C. Schütz, Das urnenfelderzeitliche Gräberfeld von Zuchering-Ost, Stadt Ingolstadt. Materialhefte zur Bayerischen Vorgeschichte A 90 (Kallmünz/Opf. 2006).

Schütz-Tillmann 1997: C. Schütz-Tillmann, Das urnenfelderzeitliche Grabdepot von Münchsmünster, Lkr. Pfaffenhofen a. d. Ilm. Germania 75(1), 1997, 19–44.

Sperber 1999: L. Sperber, Zu den Schwertträgern im westlichen Kreis der Urnenfelderkultur: Profane und religiöse Aspekte. In: Eliten in der Bronzezeit. Monographien des RGZM 43,2 (Bonn 1999) 605–659.

Sprockhoff 1951: E. Sprockhoff, Pfahlbaubronzen in der Südzone des Nordischen Kreises während der jüngeren Bronzezeit. Archaeologia Geographica 2(3/4), 1951, 120–128.

Sprockhoff 1956: E. Sprockhoff, Jungbronzezeitliche Hortfunde der Südzone des Nordischen Kreises (Periode V). Kataloge des RGZM 16 (Mainz 1956).

Tarbay 2019: J. G. Tarbay, Melted Swords and Broken Metal Vessels. A Late Bronze Age Assemblage from Tatabánya-Bánhida and the Selection of Melted Bronzes. Dissertationes Archaeologicae ex Instituto Archaeologico Universitatis de Rolando Eötvös nominatae Ser. 3,7, 2019, 29–99.

Thrane 1975: H. Thrane, Europæiske forbindelser. Bidrag til studiet af fremmede forbindelser i Danmarks yngre broncealder (periode IV–V). Nationalmuseets skrifter, Ark.-hist. raekke 16 (København 1975).

Thrane 1984: H. Thrane, Lusehøj ved Voldtofte. En sydvestfynsk storhøj fra yngre broncealder. Fynske studier 13 (Odense 1984).

Trachsel 2004: M. Trachsel, Untersuchungen zur relativen und absoluten Chronologie der Hallstattzeit. Universitätsforschungen zur Prähistorischen Archäologie 104 (Bonn 2004).

Van der Vaart-Verschoof 2017: S. Van der Vaart-Verschoof, Fragmenting the Chieftain. Papers on Archaeology of the Leiden Museum of Antiquities 15 (Leiden 2017).

Vosteen 1999: M. U. Vosteen, Urgeschichtliche Wagen in Mitteleuropa. Freiburger Archäologische Studien 3 (Rahden/Westf. 1999).

Wiesner 2009: N. Wiesner, Grabbau und Bestattungssitten während der Urnenfelderzeit im südlichen Mitteleuropa. Internationale Archäologie 110 (Rahden 2009).

Winghart 1999: S. Winghart, Die Wagengräber von Poing und Hart a. d. Alz. Evidenz und Ursachen spätbronzezeitlicher Elitenbildung in der Zone nordwärts der Alpen. In: Eliten in der Bronzezeit. Monographien des RGZM 43,2 (Bonn 1999) 515–532.

Wirth 2010: S. Wirth, Sonnenbarke und zyklisches Weltbild – Überlegungen zum Verständnis der spätbronzezeitlichen Ikonographie in Mitteleuropa. In: H. Meller/F. Bertemes (eds.), Der Griff nach den Sternen. Tagungen des Landesmuseums für Vorgeschichte Halle/Saale 5 (Halle/Saale 2010) 501–515.

Wirth 2021: S. Wirth, Une place au soleil. Le motif central de la symbolique du Bronze final en contexte et en action. In: C. Marcigny/C. Mordant (eds.), Bronze 2019. Supplément no. 7 au Bulletin de l'Association pour la Promotion des Recherches sur l'Âge du Bronze (Nonant 2021) 643–660.

Zuber 2018: J. Zuber, Spätbronzezeitliche Gräber von der Fritz-Fend-Straße in Regensburg. Beiträge zur Archäologie in der Oberpfalz und Regensburg 2018, 9–28.

https://doi.org/10.2369/9783869354439.beyond-urnfields

Claudia Pankau
Institut für Archäologische Wissenschaften, Abt. III Vor- und Frühgeschichte
Goethe-Universität Frankfurt
Frankfurt am Main
Germany
Pankau@em.uni-frankfurt.de

https://doi.org/10.2369/9783869354439.beyond-urnfields

Between the Urnfield culture and the Nordic Bronze Age. Man and environment in the Late Bronze Age on the southwestern Baltic coast

Katarzyna Ślusarska

Keywords: Late Bronze Age, environmental and settlement data integration, Szczecin Lowland

Abstract: This chapter evaluates the Lower Oder Lowlands' material finds and settlement pattern characteristics relating to the palaeoenvironmental factors in the Late Bronze and the Early Iron Ages (from the late 2nd millennium until the first half of the 1st millennium BC). The timeframe covers the development of classical traits of the so-called 'West-Pomeranian', 'Usedom-Uecker' and subsequent Göritzer groups of the Maritime Urnfield culture. According to traditional periodisation, this period comprises the Bronze Age from the late Period IV/early Period V until the final Period VI, which means the end of the 2nd and first half of the 1st millennium BC in calendar chronology. The Szczecin Lowland environment of the first half of the 1st millennium BC shows signs of human impact, manifested mainly by forest clearances. Existing societies seem to have continued the earlier 'Late Bronze Age' strategies regarding subsistence economy and settlement patterns. Transformations of the burial practices are not as evident and rapid in the Szczecin Lowland as in East Pomerania or the southern part of the European Plain. Even in Bronze Age Period VI, signs of the environmental crisis caused by the abrupt climate change in the first half of the 1st millennium BC do not seem to be visible in the Szczecin Lowland, according to available data.

Introduction

Some archaeologists use the terms 'Urnfield circle' and 'Nordic circle' to describe archaeologically observed entities within the late 2nd and early 1st millennium BC in central Europe and southern Scandinavia, respectively. In short, both traditions differ regarding material culture, funerary tradition and settlement organisation. The Urnfield circle (or culture) can be characterised by the presence of vast cemeteries containing flat cremation graves with grave pottery and a minimal amount of metal objects. The pottery is biconical in shape, which applies to both settlement and burial ware. The most characteristic features of metal object styles are modest ornamentation, riveting as a joining method, and modelling bars or wires to obtain a final product (Kaczmarek 2017).

In the Nordic Bronze Age, cremation is present, and its role in the funeral rites increases towards the end of the Bronze Age. Cremation becomes more popular than inhumation during the later periods of the Bronze Age, with an increase in the number of flat graves. The metal production style is very elaborate regarding the form of objects and the specific ornamentation. The predominant technique was casting, even for joining separately cast parts of an object. The ornamentation includes

https://doi.org/10.2369/9783869354439.beyond-urnfields

abstract, mostly spiral, decoration and narrative motifs. In contrast, the pottery style was far from elaborate (Thrane 2013).

The southern zone of the European Plain and European uplands north of the Alps is understood as a region of the Urnfield circle, and southern Scandinavia and northern Germany as the core region of the Nordic Bronze Age. However, the northern Baltic zone fits neither of these perfectly (see Kneisel et al. 2019; Dzięgielewski, this volume).

This chapter evaluates the material finds of the Lower Oder Lowlands according to the artefacts and the palaeoenvironmental factors in the Late Bronze and the Early Iron Age (from the late 2nd millennium until the first half of the 1st millennium BC).

Chronological and spatial framework

This chapter covers the chronological frame from the late Period IV/early Period V of the Bronze Age until the final stage of the Bronze Age (Period VI). For Pomerania, the term 'Final Bronze Age'/ Period VI reflects this transition period's main trait better than the term 'Hallstatt C and D' traditionally applied in Polish archaeological literature (Ślusarska 2022).

The study area comprises the Szczecin coastland around the Szczecin Lagoon, the lower Oder, and the areas adjacent to the Bay of Pomerania (Fig. 1). The western limit is the contemporary Polish-German border, along the River Oder. The decision on this delimitation has been made due to difficulties in comparing surface surveys on both sides of the border. However, this applies only to analyses of the archaeological material. Four palynological cores (Ahlbeck Lake) from German territory are included here. The coring places are situated only up to 5 km west of the border, and these four cores supplement information on the vegetation change in the Ueckermünde Heath region, sometimes referred to as Police Plain (German: *Ueckermünder Heide*). Poland and Germany have unique surface survey programmes, but they are built on different principles and thus are hardly comparable. Considering the archaeological material from the adjacent regions of Germany would distort the picture of the cultural situation, and for this reason these materials remain outside the presented study.

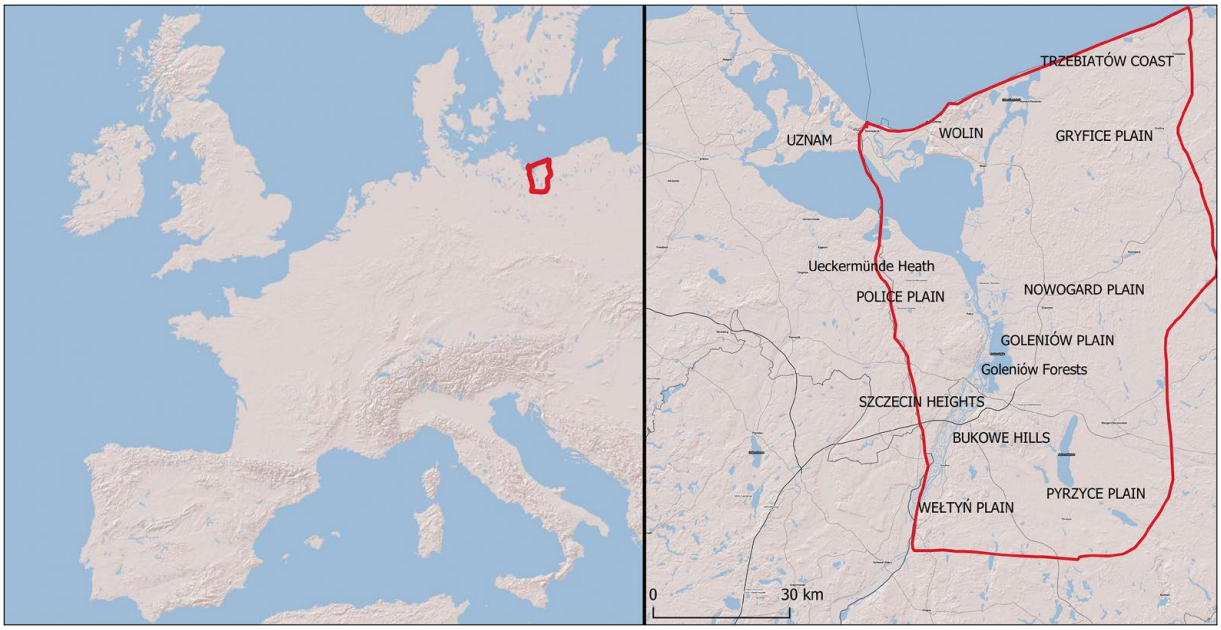


Fig. 1. The study area in the Polish Szczecin Lowland (map K. Ślusarska; basemaps: ESRI Shaded Relief, ESRI Stamen Toner Hybrid obtained through QuickMapServices QGIS plugin; map data © 2022).

https://doi.org/10.2369/9783869354439.beyond-urnfields

The northernmost part of the study area consists of the Trzebiatów coastland up to the Rega river mouth, including the islands of Uznam (German: *Usedom*) and Wolin. The Gryfice and Nowogard plains limit the study area to the east. South of this coastal area, the eastern border is less clear. The natural boundaries are represented by the margins of the Ińsko Lakeland and the Łobez Uplands. Furthermore, the northern course of the River Rega, north of Lisowskie Lake, also forms the limit. The Szczecin Heights and the Bukowe hills on both sides of the lower Oder River delimit the southernmost part of the study area. The landscape of these regions has been completely transformed over the last two hundred years.

Environmental conditions: Geological history, hydrology, soils and their formation

The Szczecin Lowland is situated on the fringes of the Palaeozoic platforms of west and central Europe. Before the Quaternary, the region was intensively shaped by the successive transportation and deposition processes resulting from the Fennoscandian ice cap dislocations. Pleistocene layers are made of till, sand, gravel, loam, and silt (Augustowski 1977, 14–28). Water availability and geological background were the main factors affecting the forest types and their pace of expansion. Pine forests covered the sandy soils. The oak forests, with an increasing occurrence of hazel, elm, lime and maple, developed on glacial tills (Borówka 2005, 14–15).

The Szczecin Lowland landscapes vary depending on the region. To the north is the seashore, which is formed out of the relics of a frontal moraine and dunes, while there is a range of moraine upland behind it (e.g. the Gryfice Plain). Regions with terminal moraines have an undulating relief. Highlands have substantial differences in heights in some areas. The Pomeranian glacial valley (German: *Urstromtal*) extends on both sides of the Szczecin Lagoon – the Oder mouth and Międzyodrze region. Here, on the sandy terraces that are raised above wet meadows, small patches of woodlands have survived today as the Goleniów Forest and the Ueckermünde Heath (Borówka 2002, 7–22).

The soils in the region are highly diverse, which impacts their agricultural suitability. Most are young soils formed on the moraines in the Late Pleistocene and the Early Holocene. Therefore, denudation and erosion processes have not had enough time to sort and wash out the bedrock. The soils of the Szczecin coastland are closely linked to climatic conditions as well as vegetation. Podzols are presently the most predominant soil type. Marsh soils, distributed in a mosaic-like fashion, are mostly found in the Oder Valley and on the shore of the Szczecin Lagoon. The best, most fertile soils (brown and black soils) are the less frequently represented ones within the region. Tiny patches occur in the south, next to the Miedwie and Płoń Lakes. However, black soils are also located in the north, near Kamień Pomorski (Piszczek 1960, 91–101). The regions with the most fertile soils have undergone the most substantial agricultural modification over the last two centuries, including complete deforestation and melioration, which also changed the water regime.

The water conditions in the Szczecin Lowlands are also very diverse, but their present appearance may not reflect the past situation. It can be assumed that the water system must have been more extensive in the Late Bronze Age and the Early Iron Age than now. Since the 19th century, many previously-existing water bodies and marshes have been drained. The Oder once was an anastomosing river running through its broad, boggy valley, which was overgrown with reeds before 19th-century regulation (Borówka 2002, 80–81).

The Szczecin Lagoon is the largest water basin within the study region; it is a relatively shallow lagoon connected to the Baltic Sea through the Piana, Świna and Dziwna straits. It is a brackish body of water, because the periodic inflow of seawater through the narrow straits is limited, while the annual freshwater influx is quite large. The low salinity of the shallow reservoir causes the lagoon to be

https://doi.org/10.2369/9783869354439.beyond-urnfields

covered in ice throughout the winter. During average winters, the ice appears late in December and lasts until late March (Borówka 2002, 74).

Due to climatic conditions and large water retention capacities in wetlands and lakes, there are no severe seasonal fluctuations in the rivers (Augustowski 1977, 85–102; Borówka 2002, 78–88). More substantial fluctuations are registered only in the River Oder, transporting snow melt waters from southern Poland. If its water level should rise from the backwater, the low-lying regions around the Szczecin Lagoon may be flooded (Borówka 2002, 78–80). Apart from the main rivers, some smaller watercourses flow through the region. However, due to drainage, their beds have also been significantly changed. Some of them are presently completely dry. There are several bigger lakes: Miedwie, Płoń, Koprowo, Gothensee, and Liwia Łuża. Many smaller bodies of water have turned into peat bogs over the last two thousand years in regions where the water level has decreased (Augustowski 1977, 85–102; Borówka 2002, 88–101). More water was retained in the Late Bronze Age and Early Iron Age in water bodies, marshes, and forests. Nowadays, the main problem is 'drying up', caused by water basin overregulation, reduced water retention in deforested lands, and strong winds over the region.

The climate of the Szczecin Lowland in the past and present is influenced by two factors – polar-marine air masses from the northern Atlantic and the Baltic Sea and the impact of the Szczecin Lagoon. Pomerania, including the Szczecin Lowland, belongs to the temperate climate zone (Augustowski 1977, 71–82). The flow of western air masses is due to the western and southwestern winds prevailing at this latitude. This results in cool summers (due to high precipitation and cloud cover) and mild winters with relatively high temperatures and rain. Even though the period of slow vegetation growth during winter is relatively short, the periodic air inflow from the Atlantic in winter causes alternate spans of cold/frost and warmth/thaw, which can be hazardous to early-germinating plants (Borówka 2002, 57–66; Czarnecka 2005, 83). For crops, frost can be disastrous and lead to reduced harvests. This might be the main element in diminishing the region's potential for agricultural activities.

The weather in the Szczecin Lowland varies on the microclimate scale in relation to the relief and vegetation. There are individual microclimates within terrain depressions (valley floors, glacial tunnels); usually, the wind is minimal, but there are higher mean temperatures within these landforms. The retention of chilly air masses and fog is also frequently seen. Slopes with a southern exposure receive much higher solar radiation than the northern ones, and thus the former seem much drier (Borówka 2002, 66). Another atmospheric phenomenon that can hurt vegetation is represented by persistent droughts, in particular those lasting more than three weeks, from April to October (Kalbarczyk/Kalbarczyk 2005, 171–183).

To sum up, soil, water, and climatic conditions make the area of the Szczecin Lowlands quite diverse in terms of the suitability of grain agriculture. This will also have been the case in pre-modern periods. At the same time, the area offers favourable conditions for other farming methods, such as animal husbandry.

Pollen data, environmental reconstructions and the palaeoenvironmental evidence

Data for flora reconstructions

Seven palynological cores are available for the Szczecin Lowland (Fig. 2 ; cf. Table 2). However, their usefulness for archaeological reconstruction varies. The main goal for most of these analyses was to reconstruct environmental change during the Late Glacial and Holocene periods. The human economy impact was considered, but it was not a main research objective (Latałowa 1994; 1998; Latałowa et al. 2003; Obremska/Cedro 2012). Three cores from Wolin Island (Kołczewo, Racze Lake, Wolin II) and the

https://doi.org/10.2369/9783869354439.beyond-urnfields

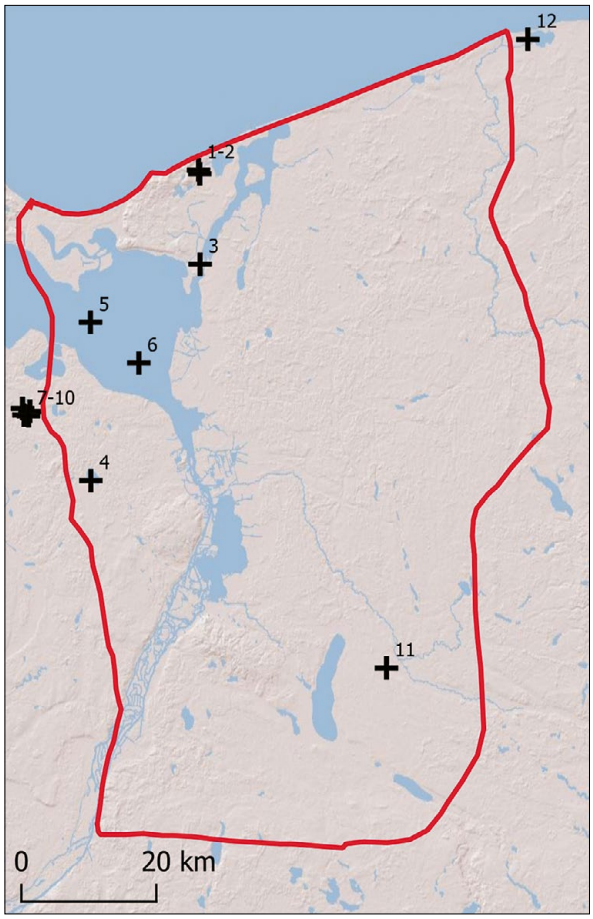


Fig. 2. Location of palynological cores. 1: Kołczewo; 2: Racze Lake; 3: Wolin II; 4: Bolkowo; 5: Szczecin Lagoon Z42/99; 6: Szczecin Lagoon Z39/99; 7–10: Ahlbeck Lake; 11: Święte 22; 12: Mrzeżyno T28 (map K. Ślusarska; basemaps: ESRI Shaded Relief obtained through QuickMapServices QGIS plugin; map data © 2022).

Święte core can be correlated with archaeological sites in the vicinity of the coring places. However, other cores allow only for the outlining of general climatic and palaeoenvironmental processes, as they cannot be associated with archaeological sites in the area (the Szczecin Lagoon, Mrzezino, and Bolkowo, as well as the four Ahlbeck Lake cores). The four Ahlbeck Lake cores from the island of Usedom are included in this chapter, as they, along with the Bolkowo core, supplement environmental information for the Ueckermünde Heath, which lacks in-depth archaeological recognition. The Święte core was obtained during the archaeological excavation of sites Święte 7, 8, and 22. Unfortunately, this core was not ^{14}C-dated, making a correlation with nearby archaeological sites tricky. However, its late Subboreal phases indicate the presence of open land and human dwellings nearby (ruderal plants such as *Artemisia*, *Urtica*), as do cereal crops (common crop weeds: *Centaurea cyanus, Sclerantus annus*) and pastures (*Rumex* spp., *Plantago* spp.).

The island of Wolin is the most thoroughly studied part of the research area discussed here. Three palynological cores from Wolin Island cover the Late Glacial and Holocene based on ^{14}C-datings (Kołczewo, Racze Lake, Wolin II). The changes observed in the palynological record were then correlated with archaeological chronology. This procedure allowed the identification of five stages of anthropogenic forest modifications linked to periods from the Mesolithic to the Early Middle Ages. Parts of the cores, dated to the first half of the 1st millennium BC, suggest that during this period slash-and-burn agriculture and livestock grazing allowed deforested spaces on the island to persist. This timespan corresponds to the period of development of the Lusatian culture (Latałowa 1998, 23–32). The pollen analyses allow the evaluation of the environmental transformations in the area around the place of coring. The indicators of open land and the decrease in forest areas (non-arboreal plants' domination over arboreal plants, presence of heathlands – *Calluna*, or pastures – *Rumex* spp., *Plantago* spp.) is repeated in most cores in a comparable timespan. At the same time, forest fire indicators (such as charcoal microparticles or *Pteridium* spores) were traced only in cores from Wolin Island (Racze, Wolin II, Kołczewo). The plant indicators do not explicitly indicate the cultivation of crops (cereal pollen are present only in cores from Wolin Island and Święte), but they do suggest the existence of deforested areas (probable pastures for livestock). Even though most cores are not in the direct vicinity of a well-excavated site, except for Święte, they still provide proxy evidence pointing towards the occupation of these regions in the periods considered in this study.

The only direct palaeobotanical record comes from Parłówko site 11. This late Lusatian settlement provides macrobotanic samples attesting to a human landscape modification in the immediate neighbourhood of the site (Abramów 2010). The presence of ruderal, nitrophilous plants (*Urtica*

https://doi.org/10.2369/9783869354439.beyond-urnfields

spp., *Chenopodium album*, *Rumex* spp.) suggests increased biogenic waste from humans and farm animals. On the other hand, perennial weeds (*Polygonum* spp., *Fallopia convolvulus*) relate to the presence of cultivated land nearby (Lityńska-Zając 2005). A large deposit of non-charred seeds of *Chenopodium album* (over 230 grains) also stems from that site, but its interpretation is unclear. *Chenopodium album* is discussed as a 'forgotten crop' (former cultivar, but not cultivated anymore) or a deliberately collected food source, but it can also result from the contamination of soil samples, especially when uncharred (Mueller-Bieniek et al. 2020)

From as early as 3000 BC, the decrease in the rate of elm (*Ulmus*) in forests has been noted in Europe. This situation is associated with agriculture (including harvesting leaves and young branches as fodder for livestock) and the spread of the so-called Dutch elm disease. It is important to note that beech, as an element of forest composition, did not appear until the final stage of the Subboreal period, no earlier than the early 1st millennium BC. The increase in hornbeam and beech coincided with the decline of hazel in Pomerania. This could be related to human activity (farming) and climate changes, including temperature changes and drops in precipitation (Ralska-Jasiewiczowa et al. 2003, 233–247).

Without human impact, the European Lowlands would be predominantly covered with forests rather than other vegetation types, as the forest is a climax plant community here. Soils, water, and climate conditions suggest this could be the case in the Szczecin Lowland, as Pomerania, based on environmental conditions, ought to be covered by eutrophic and mesotrophic deciduous woodland with beech forests. Other forest types (e.g. Atlantic acidophilus forests, oak-hornbeam forests, alder carrs, wetland birch forests) would also have been a part of the woodlands (Matuszkiewicz 2008). The ancient Pomeranian Valley areas (the Goleniów Forest and Ueckermünde Heath) are areas of sparse conifer forests and wetland, and riparian forests have survived into modern times. However, most of these forests today are modern silviculture rather than natural forests. Nevertheless, complexes of dense forests in these areas have been marked on Eilhard Lubinus' 'Great Map of the Duchy of Pomerania' from the early 17th century. This map could be treated as proxy data, suggesting that there was no significant and permanent deforestations in the later part of prehistory and the Middle Ages in this area. The relatively poor, podzolic soils and vast swamps make this region unattractive for permanent settlement.

It is challenging to assess the potential of water plant communities, particularly those of the Oder river estuary, the Szczecin Lagoon and the Miedwie Lake. These areas have been profoundly transformed to allow shipping traffic in modern and contemporary times. Changes have also been caused by the construction and maintenance of the local hydro-technical infrastructure and the appearance of species foreign to the local flora and fauna that have arrived within the ballast tanks of ships (Latałowa et al. 2003, 119–122).

Proxy data for fauna reconstruction

It is difficult to evaluate the spectrum of wild animals in the Szczecin Lowland in the 1st millennium BC due to the changing composition of the fauna caused by human economy. With the presence of dense forests and extensive wetlands in the earlier phases of the Late Holocene, one would expect the existence of species similar to both the present ones (red deer, roe deer, wild boar, elk, forest marten, fox, hare, beaver, and some species of rodents), and species that no longer occur within this area (wolf, bear, aurochs, and lynx).

The water mammals should complete the list. These are the animals living in inland waters (e.g. beaver, otter, European mink) or marine environments (harbour porpoise, grey, ringed and harbour seal). Only two sites in the Szczecin Lowland yield information on game animals: Szczecin Wzgórze and Szczecin Grodzka (Chełkowski 1965; Makowiecki 2003). Two sites (both in Szczecin) were probably settlements of the Late Bronze Age. Red deer and boar bones were discovered there; a typical set of game animals (Ślusarska 2021). However, the site of Szczecin Wzgórze provides more

https://doi.org/10.2369/9783869354439.beyond-urnfields

important information – in addition to beaver bones, hare bones were also discovered there. Hare is a typical animal of the open landscape, so the presence of hare bones can be a proxy for deforested areas in the Szczecin Lowland at the end of the Bronze Age (Smith at al. 2005).

However, it is impossible to recreate the full list of wild species. The archaeological and historical data do not reflect the total composition of animal species, as not all of them were game animals. The whole carcass was not always brought to the settlement. Most of the hunted animals were processed and disassembled at the killing site (e.g. the remains of animals hunted only for their fur were never brought to the settlement; see Piątkowska-Małecka 2013, 69–74; Ślusarska 2021).

The moderate climate, particularly warm with relatively short winters, and the significant number of water bodies and wetlands in the Szczecin Lowland favoured periodical visits of many birds, including waterfowl, for wintering and hatching. Today, the Szczecin Lowland, the Lower Oder valley, the Kamień Lagoon, the islands in the Świna river mouth, and the Miedwie and Dąbie Lakes are overwintering places for many bird species (Ławicki et al. 2009, 268–282). Unfortunately, no archaeological animal bone collections from the Szczecin Lowland provide any information about either the presence or exploitation of waterfowl species (Ślusarska 2021).

Most fish species living in the water bodies of the Szczecin coastland can live in both habitats – fresh and saline/brackish waters. The life cycle of some of them (mostly *Salmonidae*, *Alosa alosa*, and Atlantic sturgeon) depends on seasonal environmental change. Eilhard Lubinus, in the description of his 'Great Map of The Duchy of Pomerania' (1618), stated that over 70 species of fish were known and fished from the Pomeranian water basins.[1] During the excavation of the Late Bronze Age sites in Szczecin Wzgórze and Szczecin Grodzka, the bones of several fish species were found, both anadromous and freshwater fish, such as common bream, common roach, sander, pike, and catfish, as well as sturgeon (Makowiecki 2003; Ślusarska 2021).

Archaeological research on the Late Bronze and Early Iron Ages in the Szczecin Lowland

It is not the main object of this contribution to provide a full presentation of the history of archaeological research concerning the Bronze and Early Iron Ages in the Szczecin Lowland. A brief introduction to the region's complex modern history is, however, needed to understand the uneven and incomplete nature of its archaeological data.

At the earliest stage of archaeological studies, in the 19th century, the Szczecin Lowland was part of the Kingdom of Prussia. This period, as everywhere, was a time of awakening interest in antiquities in a typical 19th-century way; it was when the first collections of material culture, mainly bronze objects, were created. But it also saw the start of the first archaeological institutions, journals and excavation programs (mainly of cemeteries). After the Second World War, the Szczecin Lowland became part of Poland but, during the war, archives and museum collections had been displaced, dispersed or destroyed. The post-war years were a time of building new institutions, exhibitions, and narratives mainly around the 'everlasting Slavic presence' issue in this region. Concerning the Bronze Age material, the main research question was whether this part of Pomerania should be included in the Nordic or the Lusatian culture zones. The Lusatian culture was, at that time, perceived as a predecessor of the Slavic tribes. The Bronze Age metallurgical style did not significantly resemble Lusatian/Urnfield styles, which lowered the interest in its 'political use' in this region and also in archaeology. In the 1980s and 1990s, the Szczecin Lowland became a region of extensive research

1 http://lubinus.pl/e-lubinusa-krotki-opis-pomorza-i-z-nim-zwiazanych-godnych-pamieci-spraw/.

https://doi.org/10.2369/9783869354439.beyond-urnfields

under the Polish Archaeological Record programme. This was primarily a conservation program that enabled the creation of an open and continuously active database of archaeological sites in Poland. The bulk of the data came from field surveys. The goal was twofold – to incorporate the surviving archival data and archaeological finds into a program for Poland and consistently register new sites. Unfortunately, the Szczecin Lowland was a distant western periphery of the newly-defined Poland after 1945, and the region was omitted from main construction and infrastructure projects for a long time. There was also just a minimal number of archaeological excavations in the area. It is only within the last 15 years that archaeological works, as part of the investments related to the construction of road S3 as well as housing constructions, intensified. The collection of archaeological evidence is an ongoing process, but the region's complex modern history makes it even more delayed in the Szczecin Lowland than elsewhere.

Surface survey data

The surface survey data originates from the field survey program entitled the 'Polish Archaeological Record' (PAR, Polish: *Archeologiczne Zdjęcie Polski, AZP*). The program was established in the 1970s, but new data are still being recorded according to its guidelines. The Szczecin Lowland is studied uniformly under the PAR program (Fig. 3). However, there are some exceptions, e.g. the woodlands near Goleniów, the forests between Tanowo and Nowe Warpno (Ueckermünde Heath) and the wetlands of the Międzyodrze region. The dense forests and marshes in these areas negatively affect the possibility of survey prospection.

Interpretation of the data concerning the Late Bronze and Early Iron Ages is quite problematic in the Szczecin Lowland, because the archaeological record consists of a mixture of surface survey data, partially excavated settlements and cemeteries, and hoards with and without precise localisations. The Szczecin Lowland area has been fairly evenly studied in field surveys under the PAR program. However, these data are only surface surveys, with all the restrictions that apply to them (e.g. different types of limits in the availability of observation – vegetation, existing infrastructure; taphonomic changes to the pottery).

A field survey coefficient (FSC) was introduced to refine the potential distortions of the picture of past settlement patterns introduced by the state of field surveys, deposition, preservation availability for field surveys, and so on. An FSC is the sum of sherds collected during field surveys attributed to a definite contemporary administrative locality (town or village), divided by the number of sites assigned to this locality. The

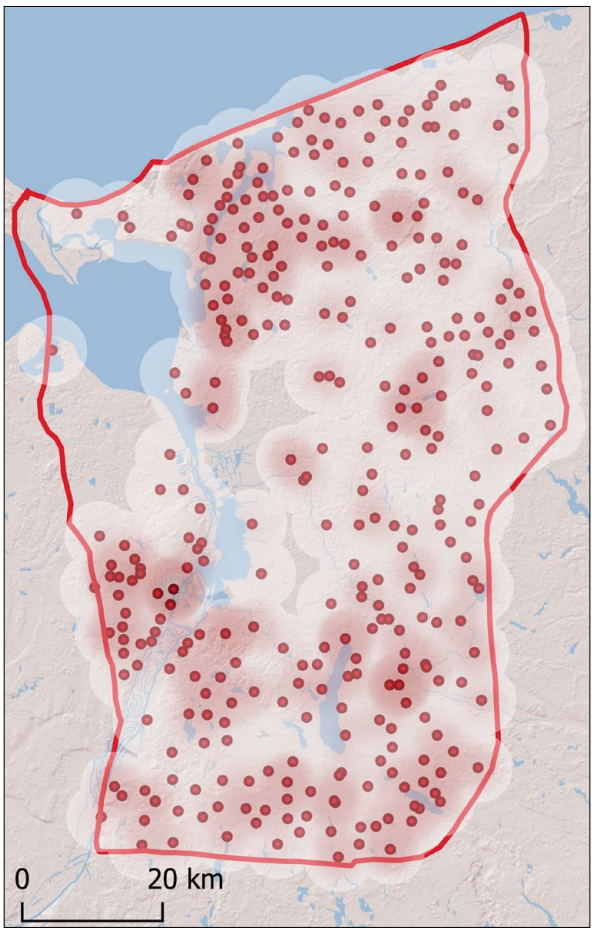
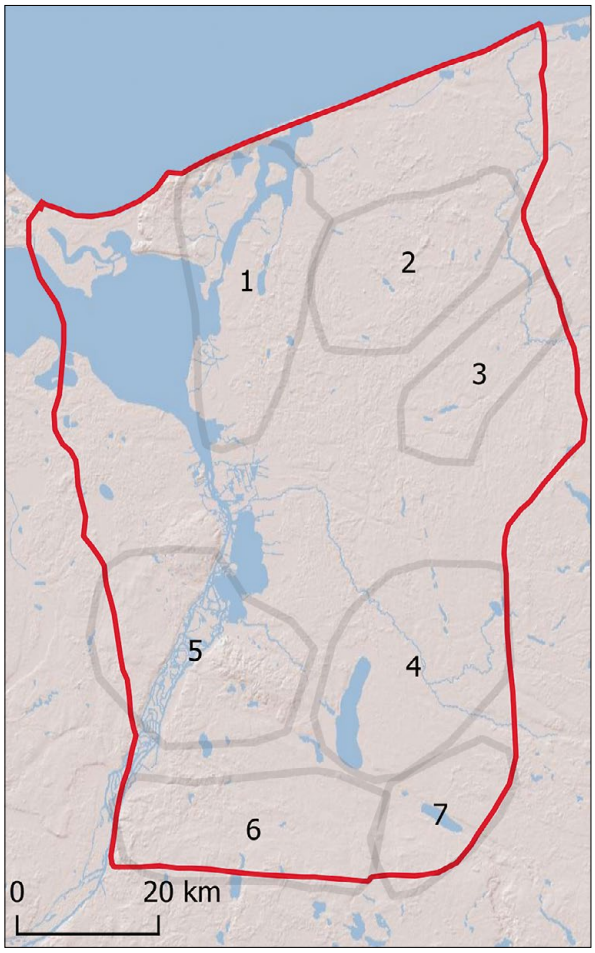


Fig. 3. Surface find distribution, combined with Kernel Density Estimation (KED) based on field survey coefficient (FSC). Red dots: Raw data (field survey sites with Lusatian culture pottery); surrounding circles: KDE allied to FSC, r = 5000 m (map K. Ślusarska; basemaps: ESRI Shaded Relief obtained through QuickMapServices QGIS plugin; map data © 2022).

https://doi.org/10.2369/9783869354439.beyond-urnfields

coefficient does not answer the question of what mechanism led to the deposition of archaeological material at a specific location, but it helps reduce the effects of current agricultural activity that otherwise obscure prehistoric occupation (Ślusarska 2022). In short, an FSC applied to field survey material describes the saturation with ceramic material. Using Kernel Density Estimation (KDE) allows the identification of the region where the pottery surface finds are more frequent. An FSC and further analyses with Kernel Density Estimation were applied to the Szczecin Lowland surface survey materials, leading to the identification of seven spatial clusters. These are (Fig. 4):



1) Wolin Island with areas adjacent to the River Dziwna between Wolin, Kamień Pomorski and Parłówko;
2) the southern part of the Gryfice Plain;
3) the northern part of the Nowogard Plain;
4) the Pyrzyce Plain – Lake Miedwie;
5) the Oder estuary to the Lagoon, with the Szczecin and Bukowe Uplands;
6) Wełtyń Plain;
7) the Pyrzyce Plain – Lake Płoń region.

The density of surface material tends to decrease gradually towards the west (to the River Randow) and northward to the Uecker estuary. This observation corresponds well to the preliminary density studies that are based on different types of sites in the region between the valleys of the Oder and Uecker on the German side of the border (see Bukowski 1998, 225 fig. 110; Griesa 1982, map 25).

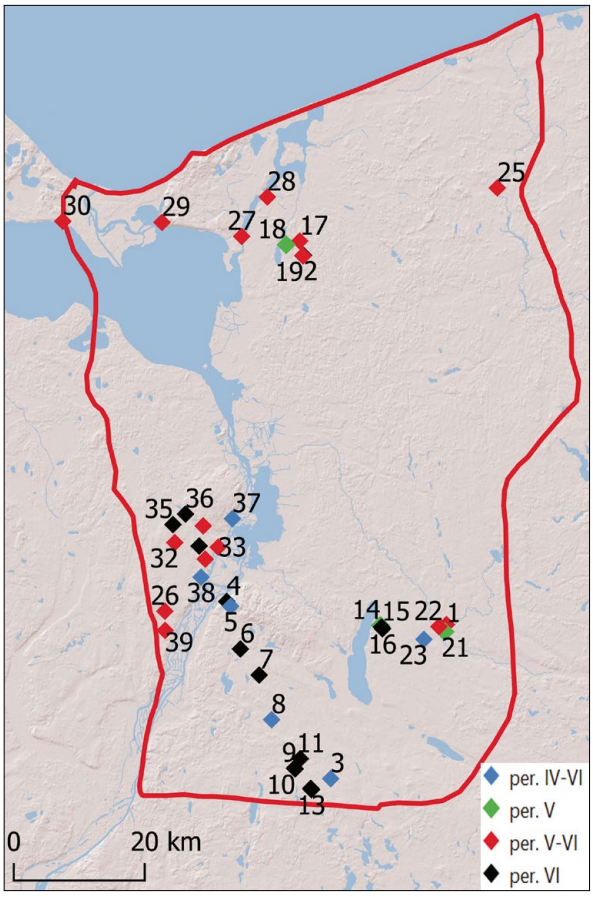
Fig. 4. Spatial clusters 1–7 based on FSC and KDE (map K. Ślusarska; basemaps: ESRI Shaded Relief, ESRI Stamen Toner Hybrid obtained through QuickMapServices QGIS plugin; map data © 2022).

Settlement data

Most data come from the dispersion analysis of sites revealed through the PAR surface survey and from some that have been excavated in the development-led mode. Moreover, there are 35 partially excavated open (non-fortified) settlements and four fortified ones (Fig. 5; Table 1). Most of the sites were only partially investigated during development-led excavations, which makes it difficult to explore their organisation and temporal development. However, Parłowko site 11 provided some information on house construction. Three one-aisled houses with pits and enclosures were identified. An area with multiple hearths, the presumed production area, was separated from the residential area. The settlement is situated 70 m from a small freshwater spring and is dated to the Bronze Age Periods IV–V based on pottery typology and technology (Pogodziński 2010).

The development-led excavations provided valuable material for establishing a preliminary pottery typology based on changes in stylistic features. The distinctive types of pottery from four sites (Kozielice 76, Szczecin-Żydowce 14, Sobiemyśl 1, Witkowo 42) indicate a continuous development

https://doi.org/10.2369/9783869354439.beyond-urnfields



during the Late Bronze Age until the Early Iron Age. The material from Szczecin-Goszczewo and Szczecin-Ustowo shows no signs of an occupation at the beginning of the Iron Age. Most open non-fortified settlements and fortified ones were established during Period V. Settlement and cemeteries from Period V can be identified by clay plates (German: *Tonscheiben*) and strongly profiled Lower Oder bowl-like forms with outward-turned and obliquely incised rims. When deposited in the graves, these types serve as a stand for the urn (especially the flat plates) or as lids (mostly profiled, bowl-like forms). The most striking feature of the Early Iron Age is the appearance of the Göritzer group style with highly profiled vessel forms and ornaments that emphasise the shape of vessels in the form of horizontal fluting and quasi-string patterns (the imprints of twisted necklaces on wet clay).

Fig. 5. Excavated non-fortified and fortified settlements. Numbers refer to those in Table 1 (map K. Ślusarska; basemaps: ESRI Shaded Relief, ESRI Stamen Toner Hybrid obtained through QuickMapServices QGIS plugin; map data © 2022).

Burials

There are 180 burial sites known in the Szczecin Lowlands. More than half of all cemeteries in the Szczecin Lowland were established in the Bronze Age Periods III–IV and ceased to be in use in Period V (Figs. 6–7). Only 37 cemeteries were established in the Early Iron Age. These are usually situated close to Bronze Age cemeteries but far enough away to be seen as separate burial places.

Cremation is the main trait that allows attribution to the Lusatian culture (1300–500 BC). Of all the features of the basic description of the Lusatian culture graves (cremation, burial in a ceramic urn with a bowl as a lid, flat grave, equipment limited to a set of additional vessels), only cremation applies to the Maritime Lusatian culture.[2] The transition from inhumation to cremation occurred during Bronze Age Period III. However, in some graves, the cremation remains were distributed at the bottom of a rectangular pit that was paved with stones. These graves also hold rich grave goods consisting of metal objects, including bronze knives and toiletries (razors, tweezers). Based on the metal finds typology and pottery style, these can be dated to the earliest phases of the Lusatian culture in the region (Bukowski 1998).

Even though the barrow is not a typical element of Urnfield circle funeral rites, it is one of the distinctive features of the Maritime Urnfield culture. Barrows covering cremated burials were erected from the start of Period IV of the Bronze Age. Towards the end of the Bronze Age, their frequency decreased (Fig. 8). The barrow usually contained a centrally placed structure – a cist made of stone slabs. Cremation remains under barrows were placed in the urn or distributed on the stone-

2 Term applied by M. Kaczmarek to the Lusatian culture groups from Pomerania: Kaczmarek 2017.

https://doi.org/10.2369/9783869354439.beyond-urnfields

Table 1. List of non-fortified and fortified settlements. BA per. = Bronze Age Period.

No.	Site	Type of settlement	Period	Lab. code	Result BP
1	Święte 22	Open	BA per. V–VI		
2	Ostomice 7	Open	BA per. VI/ Pre-Roman	MKL-517 MKL-518	2310 ± 50 2230 ± 50
3	Kozielice 76	Open	BA per. IV–VI	Poz-31792	2485 ± 35
4	Szczecin-Żydowce 12	Open	BA per. VI		
5	Szczecin-Żydowce 14	Open	BA per. IV–VI		
6	Wysoka Gryfińska 29	Open	BA per. VI		
7	Drzenin 9	Open	BA per. VI		
8	Sobiemyśl 1	Open	BA per. IV–VI		
9	Parnica 6	Open	BA per. VI		
10	Parnica 7	Open	BA per. VI		
11	Czarnowo 59	Open	BA per. VI		
12	Mielno Pyrzyckie 18	Open	BA per. VI/Pre-Roman		
13	Mielno Pyrzyckie 20	Open	BA per. VI		
14	Kunowo 31	Open	BA per. VI		
15	Kunowo 30	Open	BA per. VI		
16	Kunowo 4	Open	BA per. VI		
17	Parłówko 11	Open	BA per. V–VI	MKL-515 MKL-516	2820 ± 80 2420 ± 60
18	Troszyn 10	Open	BA per. VI/Pre-Roman		
19	Ostomice 14	Open	BA per. V–VI		
20	Ostromice 9	Open	BA per. V–VI		
21	Święte 7	Open	BA per. V–VI/Pre-Roman	MKL-66	2620 ± 70
22	Święte 8	Open	BA per. V–VI/Pre-Roman	MKL-67 MKL-72 MKL-73	2710 ± 70 2370 ± 59 2390 ± 60
23	Witkowo 42	Open	BA per. IV–VI		
24	Szczecin -Gumieńce 17	Open	BA per. V–VI		
25	Gryfice Stare Miasto	Open	BA per. V–VI		
26	Kolbaskowo 1	Open	BA per. V–VI		
27	Wolin Wzgórze Młynówka	Open	BA per. V–VI		
28	Sibin 4	Open	BA per. VI		
29	Lubin	Fortified	BA per. V–VI		
30	Kamminke	Fortified	BA per. V–VI		
31	Szczecin-Niemierzyn	Open	BA per. V–VI		
32	Mierzyn	Open	BA per. V–VI		
33	Szczecin Wzgórze Zamkowe	Fortified	BA per. V–VI		
34	Szczecin Świerszczewo	Open	BA per. VI		
35	Bezrzecze	Open	BA per. VI		
36	Szczecin Głębokie	Open	BA per. VI		
37	Golęcino	Open	BA per. IV–V		
38	Ustowo	Open	BA per. IV–V		
39	Krzemieniec	Fortified	BA per. V–VI		

https://doi.org/10.2369/9783869354439.beyond-urnfields

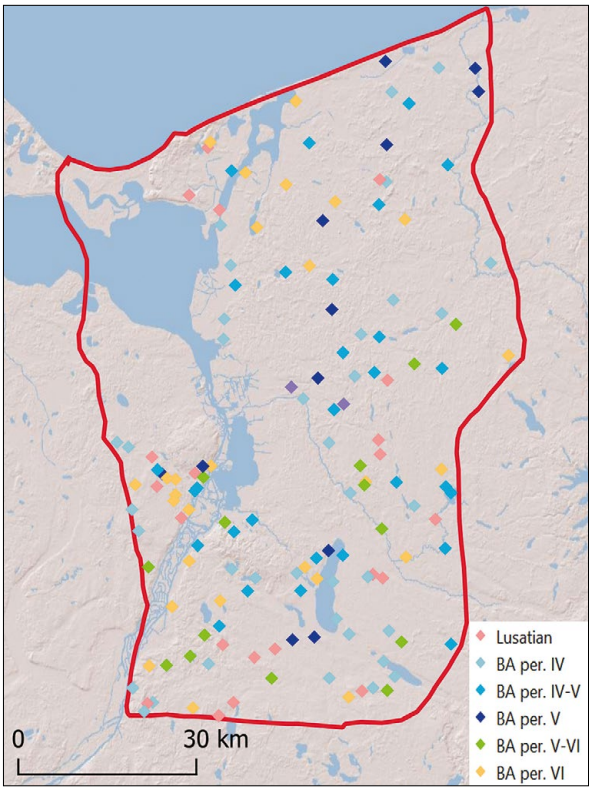


Fig. 6. The distribution of cemeteries, based on the number of cemeteries attributed to one contemporary administrative locality (towns or villages). BA per. = Bronze Age Period (map K. Ślusarska; basemaps: ESRI Shaded Relief, ESRI Stamen Toner Hybrid obtained through QuickMapServices QGIS plugin; map data © 2022).

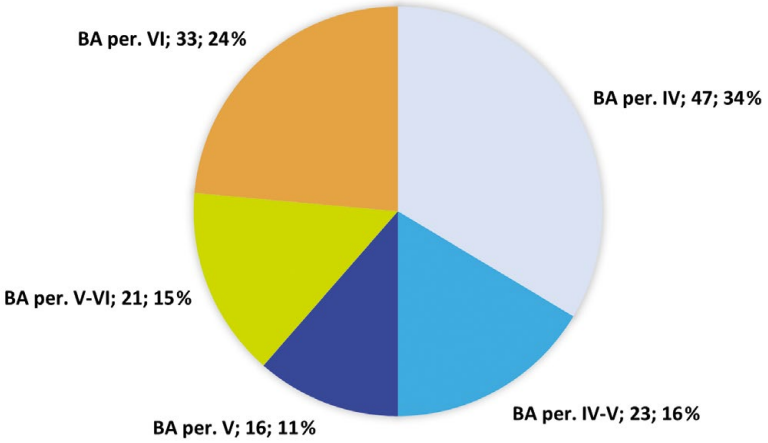


Fig. 7. The number of cemeteries/graves assigned to particular Bronze Age phases. BA per. = Bronze Age Period.

paved bottom. Flat graves usually resemble typical urnfield culture graves (pit with lidded urn) or have small stone circle-like or nest-like structures (Polish: *groby obwarowane*) built around the urn (Kaczmarek 2015; the term 'stone nest' is applied in Fig. 8). Barrows were even constructed during Period VI of the Bronze Age, but less frequently (Bukowski 1998, 198–199; Siuchniński 1956, 7–40). Unfortunately, detailed analyses of the funeral rites and of the dynamics of change in this field are not yet completed for Pomerania. Most data come from partially excavated sites or/and are unpublished.

It is reasonable to assume that both types of grave architecture (flat graves and barrows) are included in the funeral tradition of the Szczecin Lowland Lusatian groups. Unfortunately, it is impossible to assess the rules governing the choice of a particular grave form at this stage of the study. The correlation analyses performed on the group of 180 sites in this study indicates a low to medium correlation between chronology and grave architecture ($r = 0.35$). Considering that funeral sites are only partially excavated (only one barrow from each group), not published at all or only partially, it is pretty

https://doi.org/10.2369/9783869354439.beyond-urnfields

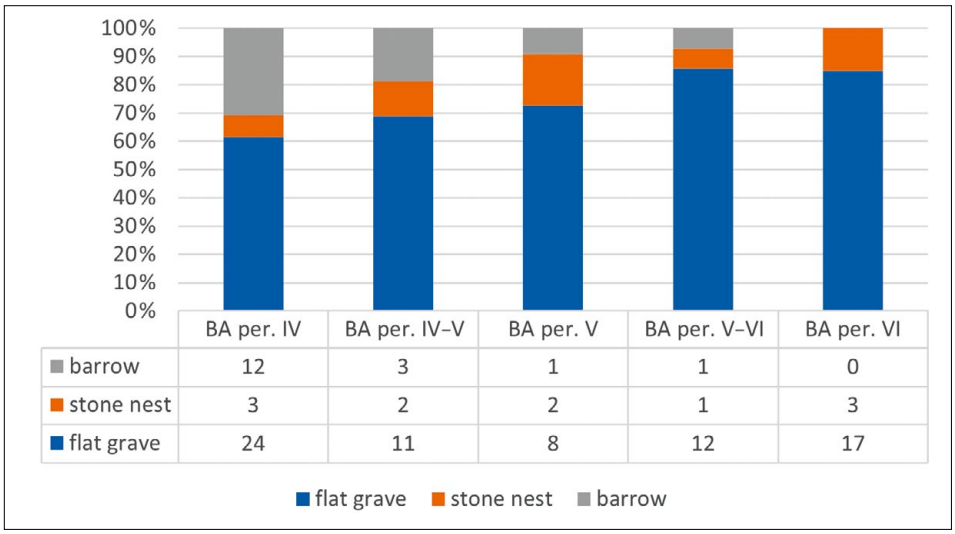


Fig. 8. Chronological distribution of burial structures. BA per. = Bronze Age Period.

challenging to formulate any detailed hypotheses. For this reason, only the spatial distribution on funeral sites was considered for this study.

Hoards

Sixty-eight hoards and 59 single finds can be attributed to the Late Bronze and Early Iron Ages in the study region. Most hoards are not precisely located, so it is difficult to compare their location to known settlements or cemeteries. Hence, hoards and even single metal finds just show human activity within a general area.

Quite a substantial amount of the Szczecin Lowland hoards from Periods V–VI could have been primarily deposited in a wet environment context. The stylistic features of objects (e.g. plate fibulas, hanging vessels) fit the Nordic Bronze Age style better than that of the Urnfield culture (Bukowski 1998; Kaczmarek 2017).

Absolute dating

The absolute chronology of the Late Bronze and the Early Iron Ages in the Szczecin Lowland has not yet been finally established. There is a limited number of ^{14}C-dates available from archaeological sites in the Szczecin Lowlands: nine dates from five sites (Fig. 9). All samples are charcoal from sites investigated during development-led excavations. Three sites (Kozielice 76, Święte 7, Parłówko 11) have been related to the Lusatian culture based on stylistic attributes of the pottery. At Kozielice 76, two features were sampled; feature 2 dates to the Late Bronze Age, whereas feature 168 dates to the Early Iron Age. The sampled features, however, did not contain any pottery, making any stylistic correlation with the ^{14}C-dates impossible. A similar situation was observed at the settlement of Święte 8, which provided three ^{14}C-dates on charcoal from features 19, 302, and 409. Feature 19 (kiln) is dated to the Late Bronze Age phase of the settlement, but unfortunately again no pottery was present in this feature. The other sampled features provided dates pointing to the second half of the 1st millennium BC, and they contained pottery consistent with the Jastorf culture. Charcoal samples from site 7 at the settlement of Ostromice date the place to the second half of the 1st millennium BC. The dates and the pottery style also point to the early phase of the Jastorf culture (in this region the so-called Marianowo phase). This culture defines the end of the Lusatian tradition in West Pomerania. Thus, the ^{14}C-dates alone provide no basis for a detailed chronological evaluation of the region. Although it is challenging to form any general statement based on such a minimal data set, the final stages

https://doi.org/10.2369/9783869354439.beyond-urnfields

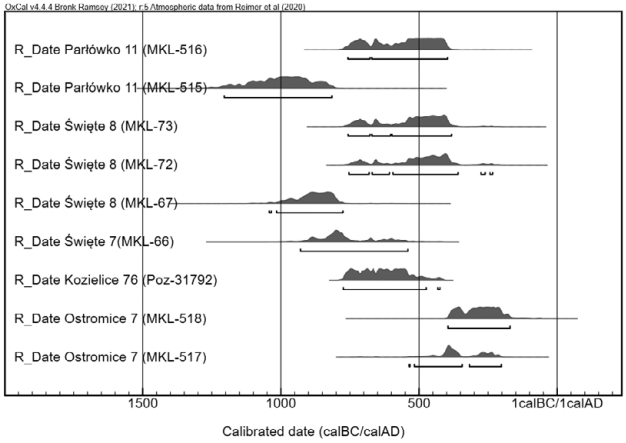


Fig. 9. Calibrated ^{14}C-ages (68 % probability; calibration after Bronk Ramsey 2009; Reimer et al. 2020).

of the Lusatian culture (the Göritzer group phase) seem to overlap partially with the early Jastorf culture of the Early Pre-Roman Iron Age. While changes are noticeable in pottery style, bronze artefacts, and burials, they are not that evident in the settlement patterns and subsistence economy.

Discussion

The comparison of the clusters identified by an FSC with other known archaeological sites (excavated settlements both non-fortified and fortified, cemeteries and hoards in the region) allows us to identify two main areas with intense occupation in the Bronze Age Periods IV–VI. One of them is the coastal region (islands of Uznam/Usedom and Wolin, from the Dziwna strait to the Rega river mouth). This northern concentration is reflected in different types of archaeological and environmental data. There are two fortified (Lubin, Kamminke) and eight non-fortified settlements concentrated in the western part – on islands and both sides of the Dziwna strait. The presence of the most fertile soils could explain their existence here. Based on pottery style, these settlements began their existence in Period V of the Bronze Age and continued into the Early Iron Age, which is supported by ^{14}C-data from the sites of Parłówko 11 and Ostromice 7. Hoards and cemeteries are more evenly distributed all over the region, also in its eastern part. Intensive human activity, including deforestation and livestock grazing, is also detectable based on palynological cores from Wolin Island and the Trzebiatów coastland (Table 2). However, cereal pollen were present only in cores from the island of Wolin. The plant macro remains from the settlement of Parłowko 11 attest to the anthropogenic modification of the site's environment, including grain agriculture (presence of common cereal weeds).

The other area of intensified occupation is located on the Pyrzyce Plain, in the Oder estuary up to the Szczecin Lagoon (Szczecin and Bukowe Uplands), as well as on the Wełtyń Plain. The southern concentration is better recognised based on archaeological data from recent development-led excavations on the ring road of Stargard, dual carriageway S3, and constant Szczecin urban agglomeration development. Undoubtedly, the attractiveness of this area is linked to the presence of fertile, alluvial soils, mainly on the Pyrzyce Plain. Based on pottery styles from excavated sites, this region was occupied by Lusatian culture groups from Period V to the beginning of the Early Iron Age, when Jastorf group settlements started to emerge in the area. The ^{14}C-dates from Święte 7 and 8 as well as Kozielice are consistent with this hypothesis. However, the palynological evidence from the southern concentration is minimal and inconclusive, because there are no ^{14}C-dates from the Święte core.

https://doi.org/10.2369/9783869354439.beyond-urnfields

Table 2. Interpretation of the pollen diagrams.

Region	Core	Observation	References
Szczecin Lagoon	Szczecin Lagoon Z42/99, 6, Szczecin Lagoon Z39/99	1. Early Holocene: significant reduction of the lagoon environments, the rate of these changes is not precisely recognised; 2. Decrease of pine tree pollen, increase of hornbeam, beech and grazing indicators (e.g. *Plantago lanceolata*); 3. *Triticum* pollen present; 4. Decrease in salinity; 5. Green algae increase – eutrophisation	Latałowa/Święta 2003, 128–129; Latałowa et al. 2003, 145
Wolin Island	Kołczewo, Wolin II, Racze Lake	1. Decrease in tree pollen; 2. Increase in fire indicators (charcoal, *Pteridium* spores); 3. Anthropopressure indicators present (*Plantago lanceolata*); 4. Cereal pollen grains recorded in all cores, but mostly in the core from Kołczewo (*Hordeum*, *Triticum* and *Secale*)	Latałowa 1992, 123–249
Trzebiatów Coastland	T28	1. Decrease in the number of trees; 2. Open-land indicators (*Plantago lanceolata*, *Rumex* spp.)	Obremska/Cedro 2012, 84
Pyrzyce Plain	Święte 22	1. Four settlemental phases related to Subboreal; 2. Indicators of open-land present, but without charcoals and *Pteridium* spores; 3. No cereal pollen, but weeds present	Malkiewicz 2009, 114–119
Ueckermünde Heath	Bolkowo 4, Ahlbeck Lake	1. Plant indicators for grazing, no cereals, alluvial forests with alder and riparian forests with elm and ash (Bolkowo); 2. Indicators of open environments (*Plantago lanceolata*), lack of plants indicating cereal cultivation (Ahlbeck Lake)	Latałowa 1994, 220; De Klerk 2005, 104; Herking/Wiethold 2004, 21–22

The late Subboreal section of the core indicates the presence of open land, including pastures and arable fields. Also, hare bones found at the fortified settlement of Szczecin Wzgórze can be proxy data suggesting the existence of substantial open areas in the site's vicinity.

The lower density of sites recorded in the Goleniów Forest and on Ueckermünde Heath is most probably due to the lack of adequate data. However, these low-lying regions with soils of a relatively low fertility, endangered by periodic floods, would not have been suitable for permanent occupation. The pollen data (cf. the Bolkowo core mentioned above) demonstrate that the areas in question were probably only used for seasonal activities (e.g. animal grazing; Ślusarska 2022).

What needs to be more frequently addressed is that the change we observe in archaeological materials does not necessarily mean the simultaneous modification of all aspects of human existence. The dynamic is high in some spheres (e.g. costume elements, bronze object styles) but relatively low in others (e.g. subsistence strategies). However, costume elements should be quite a conservative element as a method of identity expression. Conservatism refers to the costume's composition, not to its components' stylistic features, which can change quite quickly. It seems to relate more to the presence of some dress elements (e.g. the presence of a necklace in a female costume), not their style and material. An example can be the ornaments on the shepherd's hats of the Carpathian highlanders. Usually, red ribbons or gold chains were used as hat decoration, but since the highlanders from the Austrian Partition became involved in the textile trade with the Adriatic coast in the 18th century, the custom of sewing on kauri shells has emerged. Today, this is a hallmark of the Zakopane highlanders' costume.

I would suggest that stylistic features, especially metal objects associated with clothing, are related to subjective values of 'attractiveness', 'novelty', and 'fashion'. These values do not show any regular-

https://doi.org/10.2369/9783869354439.beyond-urnfields

ity in their transformations as they are strongly context-related. However, they can mirror the shifts in the most frequent contact direction or contact zones. On the other hand, the worldview expressed in funeral practices seems less prone to modifications based on changes in fashion. Modifications in this sphere usually reflect more general changes concerning ideas of man, his fate and afterlife. Most of the data available from archaeological observations come from graves or hoards. A burial costume is a unique form of costume – a ceremonial one, and as such is subjected to the same rules of conservatism as other elements of funerary rites. Hoards are more complex depending on the type of hoard and the method of its deposition.

Bronze Age people could have realised the ineffectiveness of traditional solutions and looked for new ways of responding to environmental changes (employing new settlement or subsistence strategies). The difference could have been recognisable, even though it was not recognised as an environmental change. This term is a contemporary construct we apply to interpret the overall situation based on relevant data (a rise of the water table, a change in forest composition, and so on). But crop failure cannot go unnoticed, especially when it happens twice or even for a third time. And it needs an explanation (most likely in terms of offending supernatural powers, e.g. Man had offended God, and he sent a catastrophe to punish humankind – a widespread mythological trope) and finding possible solutions. Some of these solutions would relate to apologies to the superpowers for the offence, but others would be associated with the need for biological survival (subsistence strategies, settlement strategies).

Conclusion

In summary, the environmental data for the Szczecin Lowland in the first half of the 1st millennium BC show signs of human impact, mainly in the form of deforestation. The limited data set depicts changes to the dynamics of settlement structures and economic strategies. Although climatic variation during the first half of the 1st millennium BC is quite well documented on a European scale (Van Geel/Renssen 1998), this general picture does not fully correspond to the situation in the Szczecin Lowland. The same can be said of the transformation of cultural traits and styles from the Late Bronze Age to the Early Iron Age within the Urnfield culture. The first half of the 1st millennium BC is a continuation of the previous strategies regarding subsistence economy and settlement patterns. The transformation of burial rites was not as evident and rapid in the Szczecin Lowland as in east Pomerania or the southern part of the European Plain (Dzięgielewski 2017; Kaczmarek 2017). There are also indications of cereal cultivation in this region, which corresponds well with the palaeobotanical assessment of soil samples from site Parłówko 11. The most densely settled region was situated on both sides of the Dziwna River as far as the Kamień Lagoon, and pollen profiles from the area confirm a significant human impact on the environment at the end of the Bronze Age and start of the Early Iron Age (progressive deforestation). The presence of *Pteridium* spores indicates that forest fires must have been frequent. These fires can have been caused by human activity, but not exclusively. Seasonal herding in fallow fields is another factor contributing to the development of meadows. The region is mostly covered by post-glacial moraine formations, but with a mosaic of more fertile soils at the mouth of the Dziwna. Fertile soil and different environmental resources can have favoured the development of settlements in the periods corresponding to the first half of the 1st millennium BC.

The abrupt climate change at this time is not detectable in the Szczecin Lowland. The shift in subsistence strategies and settlement patterns that could be proxy evidence of environmental instability was not noticeable in the Szczecin Lowland before the end of Period VI. Based on ecological data, the economy in Periods V–VI was mixed, with a higher rate of cereal agriculture on rich soils and a higher rate of pasture on more deficient soils. However, a temporary decline in settlement activities, synchronous with the archaeologically observed disappearance of Lusatian culture settlements and

https://doi.org/10.2369/9783869354439.beyond-urnfields

cemeteries in the second half of the 1st millennium BC, can be understood as related to environmental change – slightly postponed effects of the abrupt climate change at the end of the Subboreal phase.

Bibliography

Abramów 2010: J. Abramów, Wyniki analizy archeobotanicznej. In P. Pogodziński (ed.), Opracowanie wyników badań archeologicznych przeprowadzonych w Parłówku na stan. 11 (AZP 21-07:48) Gmina Wolin, woj. zachodniopomorskie inwestycja pn. "Budowa węzła Parłówko wraz z budową obwodnic miejscowości Troszyn i Ostromice" (Warszawa 2010) 135–155). https://www.nid.pl/pl/Dla_specjalistow/Badania_i_dokumentacja/zabytki-archeologiczne/publikacje-wynikow-badan/Parlowko_11.pdf.

Augustowski 1977: B. Augustowski, Pomorze (Warszawa 1977).

Borówka 2002: R. Borówka, Środowisko geograficzne. In: K. Borówka/T. Heese/S. Friedrich/J. Jasnowska/R. Kochanowska (eds.), Przyroda Pomorza Zachodniego (Szczecin 2002) 6–108.

Borówka 2005: R. Borówka, Budowa geologiczna i rozwój rzeźby Pomorza Zachodniego. In: R. Borówka/S. Musielak (eds.), Środowsko przyrodnicze wybrzeży Zatoki Pomorskiej i Zalewu Szczecińskiego (Szczecin 2005) 5–28.

Bronk Ramsey 2009: C. Bronk Ramsey, Bayesian Analysis of Radiocarbon Dates. Radiocarbon 51(1), 2009, 337–360. https://doi.org/10.1017/S0033822200033865.

Bukowski 1998: Z. Bukowski, Pomorze w epoce brązu w świetle dalekosiężnych kontaktów wymiennych (Gdańsk 1998).

Chełkowski 1965: Z. Chełkowski, Szczątki ryb z badań wykopaliskowych na grodzisku kultury łużyckiej w Szczecinie (Wzgórze Zamkowe). Materiały Zachodniopomorskie 11, 1965, 543–550.

Czarnecka 2005: M. Czarnecka, Intensywność odwilży atmosferycznych w Polsce, Woda-Środowisko-Obszary Wiejskie 5(14), 2005, 83–92.

De Klerk 2005: P. De Klerk, A pollen diagram from the Ahlbecker Seegrund (Ueckermünder Heide, Vorpommern, NE Germany) from the legacy of Franz Fukarek. Archiv für Naturschutz und Landschaftsforschung 44(3), 2005, 93–108.

Dzięgielewski 2017: K. Dzięgielewski, Late Bronze and Early Iron Age communities in the northern part of the Polish Lowland (1000–500 BC). In: U. Bugaj (ed.), The Past Societies. Polish Lands from the First Evidence of Humane Presence to the early Middle Ages 3: 2000–500 BC (Warszawa 2017) 295–340.

Griesa 1982: S. Griesa, Die Göritzer Gruppe. Veröffentlichungen des Museums für Ur- und Frühgeschichte Potsdam 16 (Berlin 1982).

Herking/Wiethold 2004: C. Herking/J. Wiethold, Klima und Vegetation während der Bronzezeit – Pollenanalytische Untersuchungen zur Rekonstruktion prähistorischer Umweltveränderungen. In: H. Jöns/F. Lüth (eds.), Mythos und Magie: Archäologische Schätze der Bronzezeit aus Mecklenburg-Vorpommern. Archäologie in Mecklenburg-Vorpommern 3 (Lübstorf 2004) 18–23.

Kaczmarek 2015: M. Kaczmarek, DOLICE. Barrow Cemeteries from the Late Bronze Age in Western Pomerania. Hyperborea 1 (Poznań 2015).

Kaczmarek 2017: M. Kaczmarek, The Snares of Ostensible Homogeneity. Lusatian Culture or Lusatian Urnfields? In: U. Bugaj (ed.), The Past Societies. Polish Lands from the First Evidence of Humane Presence to the early Middle Ages 3: 2000–500 BC (Warszawa 2017) 263–293.

Kalbarczyk/Kalbarczyk 2005: E. Kalbarczyk/R. Kalbarczyk, Identyfikacja okresów suszy atmosferycznej w okolicy Szczecina w latach 1963–2002. Woda-Środowisko-Obszary Wiejskie 5(14), 2005, 171–183.

Kneisel et al. 2019: J. Kneisel/W. Dörfler/S. Dreibrodt/S. Schaefer-Di Maida/I. Feeser, Cultural change and population dynamics during the Bronze Age: Integrating archaeological and palaeoenvironmental evidence for Schleswig-Holstein, Northern Germany. The Holocene 29(10), 2019, 1607–1621.

Latałowa 1992: M. Latałowa, Man and vegetation in the pollen diagrams from Oli Island (NW Poland). Człowiek i szata roślinna w diagramach pyłkowych z wyspy Wolin. Acta Paleobotanika 32(1), 1992, 123–249.

Latałowa 1994: M. Latałowa, Datowanie palinologiczne i charakterystyka paleobotaniczna profilu archeologicznego w Bolkowie koło Szczecina. Folia Praehistorica Posnaniensia VI, 1994, 213–224.

Latałowa 1998: M. Latałowa, Zarys późnoglacialnej i holoceńskiej historii roślinności wyspy Wolin. In: J. Herbich/M. Herbichowa (eds.), Szata roślinna Pomorza – zróżnicowanie, dynamika, zagrożenia, ochrona. Przewodnik Sesji Terenowych 51 Zjazdu PTB 15.–19.09.1998 (Gdańsk1998) 23–32.

Latałowa/Święta 2003: M. Latałowa/J. Święta, Późnoglacjalna i holoceńska sukcesja roślinności lokalnej na obszarze Zalewu Szczecińskiego. In: R. K. Borówka/A. Witkowski (eds.), Człowiek i środowisko przyrodnicze Pomorza Zachodniego (II Środowisko abiotyczne) (Szczecin 2003) 123–129.

Latałowa et al. 2003: M. Latałowa/A. Witkowski/B. Wawrzyniak-Wydrowska/J. Święta/R. Woziński/R. Borówka, Ewolucja ekosystemów na obszarze Zalewu Szczecińskiego w późnym glacjale i holocenie. In: R. K. Borówka/A. Witkowski (eds.), Człowiek i środowisko przyrodnicze Pomorza Zachodniego (II Środowisko abiotyczne) (Szczecin 2003) 119–122.

Ławicki et al. 2009: Ł. Ławicki/S. Guentzel/M. Jasiński/Z. Kajzer/M. Żmichorski, Avifauna lęgowa Doliny Dolnej Odry. Notatki Ornitologiczne 50, 2009, 268–282.

https://doi.org/10.2369/9783869354439.beyond-urnfields

Lityńska-Zając 2005: M. Lityńska-Zając, Chwasty w uprawach roślinnych w pradziejach i wczesnym średniowieczu (Kraków 2005).

Malkiewicz 2009: M. Malkiewicz, Analiza palinologiczna osadów organicznych stanowiska archeologicznego Święte. Aneks 1. In: J. Affelski/M. Ignaczak/H. Machajewski/Z. Woźniak/D. Żychliński (eds.), Opracowanie wyników ratowniczych badań archeologicznych na stanowisku nr 22 w Świętym (AZP 33-10/128), gm. Stargard, pow. stargardzki, woj. zachodniopomorskie. Unpubl. excavation report; Wojewódzki Urząd Ochrony Zabytków w Szczecinie (Gniezno 2009).

Makowiecki 2003: D. Makowiecki, Historia ryb i rybołówstwa w holocenie na Niżu Polskim w świetle badań archeoichtiologicznych (Poznań 2003).

Matuszkiewicz 2008: J. M. Matuszkiewicz, Potential natural vegetation of Poland (Potencjalna roślinność naturalna Polski). IGiPZ PAN (Warszawa 2008). https://www.igipz.pan.pl/Roslinnosc-potencjalna-zgik.html.

Mueller-Bieniek et al. 2020: A. Mueller-Bieniek/J. Pyzel/M. Kapcia, Chenopodium Seeds in Open-Air Archaeological Sites – How to Not Throw the Baby Out with the Bathwater. Environmental Archaeology 25(1), 2020, 69–81. https://doi.org/10.1080/14614103.2018.1536500.

Obremska/Cedro 2012: M. Obremska/B. Cedro, Rekonstrukcja zmian roślinności w okolicy Mrzeżyna na podstawie analizy pyłkowej osadów z kopalnej części rynny Samowa (profil T28). In: B. Cedro (ed.), Późnoglacjalne i holoceńskie przemiany środowiska przyrodniczego zarejestrowane w osadach profilu T28 z okolic Mrzeżyna na podstawie badań wielodyscyplinarnych, (Szczecin 2012) 73–88.

Piątkowska-Małecka 2013: J. Piątkowska-Małeczka, Łowiectwo ssaków na ziemiach polskich: Od neolitu do okresu wędrówek ludów (Warszawa 2013).

Piszczek 1960: J. Piszczek, Ogólna charakterystyka gleb województwa szczecińskiego, Roczniki Gleboznawcze. Soil Science Annual 9, 1960, 87–101.

Pogodziński 2010: P. Pogodziński, Opracowanie wyników badań archeologicznych przeprowadzonych w Parłówku na stan 11 (AZP 21-07:48), gm. Wolin, woj. zachodniopomoskie. Unpubl. excavation report, Wojewódzki Urząd Ochrony Zabytków w Szczecinie (Gdańsk 2010).

Ralska-Jasiewiczowa et al. 2003: M. Ralska-Jasiewiczowa/D. Nalepka/T. Goslar, Some problems of forest transformation at the transition to the oligocratic/Homo sapiens phase of the Holocene interglacial in northern lowlands of central Europe. Vegetation History and Archaeobotany 12, 2003, 233–247.

Reimer et al. 2020: P. Reimer/W. Austin/E. Bard/A. Bayliss/P. Blackwell/C. Bronk Ramsey/M. Butzin/H. Cheng/R. Lawrence Edwards/M. Friedrich/P. M. Grootes/T. P. Guilderson/I. Hajdas/T. J. Heaton/A. G. Hogg/K. A. Hughen/B. Kromer/S. W. Manning/R. Muscheler/J. G. Palmer/C. Pearson/J. van der Plicht/R. W. Reimer/D. A. Richards/E. Marian Scott/J. R. Southon/C. S. M. Turney/L. Wacker/F. Adolphi/U. Büntgen/M. Capano/S. M. Fahrni/A. Fogtmann-Schulz/R. Friedrich/P. Köhler/S. Kudsk/F. Miyake/J. Olsen/F. Reinig/M. Sakamoto/A. Sookdeo/S. Talamo, The IntCal20 Northern Hemisphere Radiocarbon Age Calibration Curve (0–55 cal kBP). Radiocarbon 62(4), 2020, 725–757. https://doi.org/10.1017/RDC.2020.41.

Siuchniński 1956: K. Siuchniński, Kurhan 60 z cmentarzyska Wartin pow. Angermünde (NRD). Materiały Zachodniopomorskie 2, 1956, 7–50.

Smith et al. 2005: R. K. Smith/N. V. Jennings/S. Harris, A quantitative analysis of the abundance and demography of European hares Lepus europaeus in relation to habitat type, intensity of agriculture and climate. Mammal Review 35(1), 2005, 1–24.

Sprockhoff 1956: E. Sprockhoff, Jungbronzezeitlische Hortfunde (Periode V) (Mainz 1956).

Ślusarska 2021: K. Ślusarska, Wild Resources in the Economy of Bronze and Early Iron Ages Between Oder and Bug Rivers – Source Overview. Open Archaeology 7(1), 2021, 177–210. https://doi.org/10.1515/opar-2020-0134.

Ślusarska 2022: K. Ślusarska, The Late Bronze Age to Early Iron Age transition in the lower Oder and the Oder lagoon region from settlement and environmental perspectives. In: D. Hofmann/F. Nikulka/R. Schumann (eds.), The Baltic in the Bronze Age. Regional patterns, interactions and boundaries (Leiden 2022) 289–308.

Thrane 2013: H. Thrane, Scandinavia. In: H. Fokkens/A. Harding (eds.), The Oxford Handbook of the European Bronze Age (Oxford 2013) 746–766.

Van Geel/Renssen 1998: B. Van Geel/H. Renssen, Abrupt Climate Change around 2,650 BP in North-West Europe: Evidence for Climatic Teleconnections and a Tentative Explanation. In: A. S. Issar/N. Brown (eds.), Water, Environment and Society in Times of Climatic Change (Dordrecht 1998) 21–41.

Katarzyna Ślusarska
University of Szczecin
Institute of History
Szczecin
Poland
katarzyna.slusarska@usz.edu.pl

https://doi.org/10.2369/9783869354439.beyond-urnfields

Urnfields in their own way: The Late Bronze Age on the southern Baltic coast (middle and eastern Pomerania)

Karol Dzięgielewski

Keywords: Late Bronze Age, Pomerania, barrows, pastoralism, bronze networks

Abstract: The traditionally perceived vision of the Late Bronze Age in Pomerania (northern Poland) emphasised the affinity of this region to other lands occupied by the Lusatian culture, an entity understood then as a self-conscious macrostructure. There was, for example, an attempt to downplay differences in the forms of material culture, such as bronze items. This had an unambiguous historical and political dimension (e.g. similarities to the Nordic Bronze Age were considered in such categories). More recent studies on socio-economic relations in Pomerania at the turn of the Bronze Age to the Early Iron Age indicate that the differences of the region in relation to the lowland areas of Greater Poland or Silesia went far beyond a greater or lesser affinity between the forms of material culture. Pomeranian communities differed from typical agrarian Lusatian (Urnfield) groups primarily in their more extensive and mobile type of economy and a model of social organisation that was adapted to it. Specific burial rites or ways of manifesting status, visible in hoarding rituals, were just a derivative of these differences. The coastal location of the region played a key role, favouring the maintenance of a network of contacts facing west and north, but not south, as in the case of the interior communities. Moreover, it allowed access to a unique local raw material: amber. The 'rediscovery' of this resource in the Late Bronze Age and the resulting supra-regional consequences helped to reinforce the uniqueness of the communities along the Baltic coasts in the Urnfield world.

Introduction

It has long been accepted that the Urnfield cultures of the central European Late Bronze Age, the Lusatian culture (LC) included, relied on mixed farming, although not without regional differences (see e.g. Harding 2000; De Hingh 2000; Przybyła 2017; Urban 2019; Korczyńska et al. 2019; Gocman 2021). Complex cereal farming, with newcomer crops such as millet, is one of the hallmarks of the Late Bronze Age (1300–750 BC) in this part of the continent, along with cremation and an egalitarian, monogamous social structure (Harding 2000; Przybyła 2013). The prevalent opinion is that 'the entire Urnfield culture in Europe is unequivocally linked to very stable settlement structures based on stationary livelihood models (horticulture and grain farming + animal husbandry)' (Kaczmarek 2017, 273).

Although the evidence for this view is inconclusive, the model itself is generally accepted for all parts of western Poland, including Pomerania, i.e. the southern Baltic coast (Gedl 1975, map 2; Kaczmarek 2017, fig. 20). In terms of terminology, since the mid-20th century, archaeological sources

https://doi.org/10.2369/9783869354439.beyond-urnfields

from the Late Bronze Age were being distinguished there as the 'West-Pomeranian' and 'East-Pomeranian (Kashubian)' groups of the LC (Kostrzewski 1958; Gedl 1975). These regional variations of the LC were also collectively coined 'the Coastal Lusatian culture' by Dąbrowski (1980). As with other regional LC groups, it was understood then as a self-conscious macrostructure, with its own peculiarities in dress and pottery decoration (Gedl 1990), and even its own 'armed forces' (Fogel 1979). Its differences from the southern LC groups were perceived mainly as regional 'ethnographical' traits; a local variant of more or less similar Lusatian societies. Although the degree of unification of Pomerania with the Lusatian south is a fact in some aspects of the culture (mostly in pottery forms; see Kostrzewski 1958; Dąbrowski 1980, 44; Uciechowska-Gawron 2007), there are mainly historiographical reasons for these similarities being underlined in the literature. As a result of pre-Second-World-War Polish-German disputes over the ethnos of Bronze Age communities, attempts were made to downplay the similarities of Pomerania to the north (the Nordic Circle), and the attachment to the 'Lusatian' milieu was brought to the fore (e.g. Kostrzewski 1958; cf. Bukowski 1998, 190; Szczurek/Kaczmarek 2022, 163–164).

Focusing on similarities among the Lusatian culture complex, resulting in the abandonment of the older, detailed divisions of regional 'Lusatian groups' (*sensu* Gedl 1975) seems to be an ongoing trend in Polish archaeological research (cf. Dąbrowski 1980; 2009; Kaczmarek 2017). However, one has to underline some differences and treat the western and central-to-eastern part of the Polish Baltic coast separately. Both areas represent parts of historical Pomerania between the Noteć river valley (the Toruń-Eberswalde *Urstromtal*) and the Baltic Sea. However, in the Late Bronze Age, the western part, the areas of the lower Odra/Oder river basin and the Szczecin Plain, to a greater extent reproduced the central European model of the Urnfield culture (cf. Ślusarska 2022; this volume), with some exceptions, such as, for instance, the use of barrows in the funeral rite (e.g. Kaczmarek 2015). The dynamics of the spread of the Urnfield phenomenon (or at least cremation) support the idea of a consistent movement from the west. At the onset of the Late Bronze Age (in the Warzenko phase,[1] dated to Montelius' Periods III and III/IV), the first cremation burials appeared in the morainic ridge of middle and eastern Pomerania (hereafter 'ME Pomerania'), heading from the direction of western Pomerania (via the lower Odra/Oder river) and bringing elements of the early-Lusatian knobbed pottery style. In subsequent phases (the Siemirowice phase, dated to Periods IV and IV/V, and the Władysławowo phase, dated to Periods V and VI [HaC]), the phenomenon reached the eastern Pomeranian fringe: the Bay of Gdańsk coast (cf. Kostrzewski 1958; Gedl 1990; Bukowski 1998; Dzięgielewski 2017). However, what I want to show here is that the cultural model east of the lower Parsęta and upper Drawa rivers – that is, in ME Pomerania (Fig. 1) – even in its younger stages differs greatly from the general Urnfield pattern.

There are other reasons to expect that this region may naturally deviate from the 'canonical' Lusatian culture. These may include its very geographical position – the mostly bare and infertile lakeland bordered by the coastal lowland and the Baltic Sea to the north and east, and by the almost impassable wetland valley of the Noteć river to the south. Moreover, in the Early Iron Age, a new phenomenon appeared right here: the Pomeranian culture (PC), widely known for its face urns and many other peculiarities unknown to the Early Iron Age Lusatian culture elsewhere (Kwapiński 1999; Kneisel 2012; Dzięgielewski 2017; Niedziółka 2018a). There is no reason to think that this new cultural model was completely foreign to the southern Baltic coast. On the contrary, we can trace the roots of most cultural features of the PC back to the Late Bronze Age, to the Urnfield period.

1 The chronology and periodisation used here follow the schemes by J. T. Podgórski (1992), adopted by the author (Dzięgielewski 2017, 299–300 fig. 2).

https://doi.org/10.2369/9783869354439.beyond-urnfields

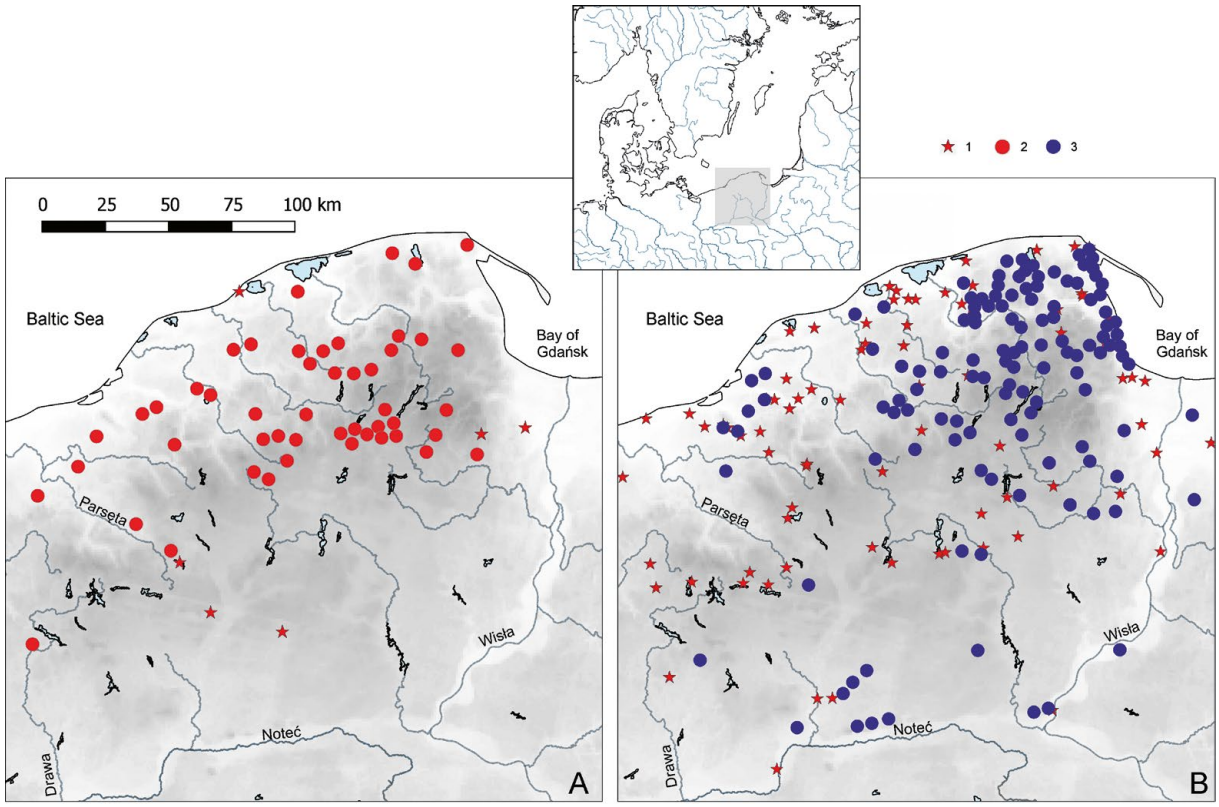


Fig. 1. Middle and eastern Pomerania in the developed Late Bronze Age. A: Period IV to early V; B: younger Period V and VI/HaC. 1: Hoards; 2: Barrow cemeteries of the Siemirowice phase (including alleged sites); 3: Flat and barrow cemeteries of the Władysławowo phase (graphics K. Dzięgielewski).

The purpose of this chapter is to point out the economic and social specificity of the coastal communities of the Late Bronze Age that can support evidence for the fundamental differences between them and the 'core' Lusatian regions in the hinterland (Silesia, Greater Poland, central Poland). These variations go deeper than just 'ethnographic' differences in dress or pottery style.

Social organisation in Late Bronze Age ME Pomerania

For the younger part of the Late Bronze Age onwards, i.e. Period IV (Phase Siemirowice; Dzięgielewski 2017, 300 fig. 2), we are able to look more closely at aspects of culture beyond the mere distribution of single dated graves and artefacts. At least, we have a considerable number of graves and necropolises at our disposal to tell us something about the society behind them.

The most striking feature of local cemeteries, shared with many northern counterparts (e.g. Thrane 1990), is that they are not 'urn fields' but are actually 'mound fields'. What should be underlined is that these are not old cemeteries of the Tumulus era with just added urned burials; most of them are cemeteries that were newly established in the Late Bronze Age. The barrows are usually not monumental, only reaching sizes of up to several metres in diameter and up to 1.5 metres in height. Frequently, the mounds were set in linear or group arrangements (Fig. 2). They are dominant but not exclusive types of burials. Some flat urn burials, which are the 'less effort' form of grave, as well as burials dug into the older mounds (even into the megalithic tombs of the Neolithic age) are also present. However, if we exclude western Pomerania (from the Drawa river westwards), we can barely discern flat, long-used urnfields from Periods III, IV, and early V. There are, of course, graves between

https://doi.org/10.2369/9783869354439.beyond-urnfields

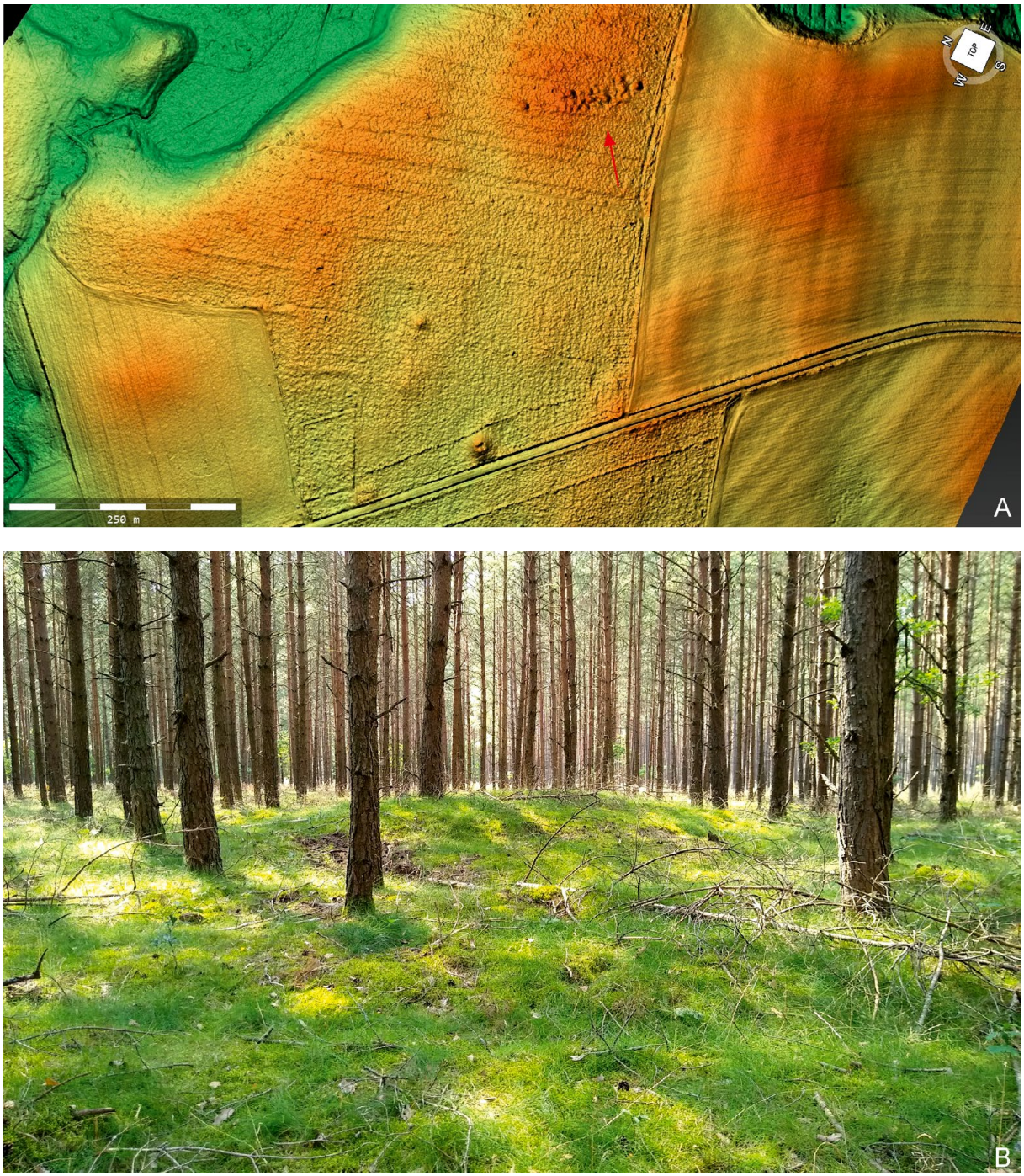


Fig. 2. Cetyń (Kołczygłówki), Bytów District. Barrow cemetery partially excavated in the pre-Second-World-War period (see Kostrzewski *1958, 279;* Podgórski *1992, fig. 1:3). A: LiDAR data elaboration (© planlauf/TERRAIN); B: Photo of one of the barrows of the southeast group by T. Wiktorzak (graphics T. Wiktorzak, K. Dzięgielewski).*

mounds, but 'pure' flat cemeteries are rare (e.g. Skrzypek 1975; for more examples from the border of western Pomerania, see Kostrzewski 1958; Cieśliński/Kasprzak 2020). Let us have a closer look at one of the better-recognised examples of east Pomeranian barrow cemeteries.

The Siemirowice necropolis (Lębork District) consists of more than 100 burial mounds with stone constructions, the heart of which are usually large stone heaps or cists made of slabs with numerous urned and unurned cinerary burials inside (Szymańska 1977; Janiak 2014). The advantage of barrow

https://doi.org/10.2369/9783869354439.beyond-urnfields

or stone cist constructions as an archaeological source is that they probably represent family clusters (such an interpretation is usually simply assumed, e.g. Łuka 1971, 85; Kneisel 2012, 337–360; 2018, 188; Janiak 2014, 229; Dzięgielewski 2017, 317; Ślusarska 2020, 199; more in-depth discussion in Malinowski 1969, 110–115; Hensel 1988, 401–405; Adamik 2012, 99–100). Looking at the sex and age structure of the deceased in Siemirowice, one can see that most of these constructions consist of burials of an adult woman and children (nine out of 16 barrows excavated), or an adult man with several women and children (four out of 16 barrows). There is only one out of 16 barrows examined that contained the remains of two men. In another article, I have considered this evidence of polygyny or serial monogamy (Dzięgielewski 2017, 316–321). Since we are dealing here with cremated individuals, the meaning of the revealed structure must not be an accurate reflection of the past society. One of the problems with the use of these data is the accuracy of sex determinations (cf. Ślusarska 2020).[2] What is supportive for this particular proposition is the fact that, in Siemirowice, in most graves with one or two children, the adult person was a woman (Szymańska 1977), which seems to be in line with the general observation on the close relationship between mothers and their (younger) children and with the fact that, in prehistory, child mortality was correlated with the mortality of women (e.g. Rebay-Salisbury 2016). Another problem is more general and concerns the possibility of accepting multiple burials as directly representing social structure. One can argue that age-sex ratios in such graves may well represent social ties other than those of a nuclear family.[3] Even if one assumes that the reasons for burial in a common cist or barrow were other than belonging to a conjugal family, it does not explain the scarcity of individuals of a certain sex (in this case males) in the entire cemetery, as the sex ratio in the model community should be close to natural (1.05 at birth or 1.00 at the age of first reproduction; Chamberlain 2006, 18–19). In Siemirowice, this ratio was closer to 0.4 (males/females).[4] Of course, we know many prehistoric cemeteries in which the sex ratio deviates from the natural one for reasons unknown to us. Therefore, the above hypothesis should only be considered as one possible explanation. However, if we agree that this picture may reflect a polygamous matrimonial model, then we should expect that other burial places would show a deficiency of women. We may point to some such examples (Grabowo Parchowskie, Bytów District; Lachowicz 1968; Rożnowski 1968), although, due to the state of anthropological investigations, they are very few. Probably, these would be cemeteries (e.g. Grabowo) that lay deeper in the moraine land, are poorer in metals and prestige goods and have a prevalence of flat ('low effort') burials.

What are the further consequences if we assume that from late Period III to early Period V middle and eastern Pomerania saw polygyny or serial monogamy as the accepted mating system? As we know from evolutionary biology and anthropology, one of the main conditions for human societies to step over the 'polygyny threshold' and make it an evolutionary stable strategy is the possibility of dividing fitness-related resources among numerous offspring without their depletion (Przybyła 2013; 2014, 172–175). This possibility is offered frequently in the economic systems of hunter-gatherer, horticultural, or pastoralist communities (Fortunato/Archetti 2010, 154). In this particular historical and environmental setting, the last of the mentioned modes of subsistence economy may be taken into account. In this context, it is also worth noting the well-known close link between pastoralism/mobile lifestyle and barrow construction (cf. Anthony 2007; Włodarczak 2011) and

2 Although one should keep in mind the limitations of the sex assessment of burned human bones, the sense and usefulness of sexing them is not generally challenged. Model studies on the cremated bones of individuals of known sex show 67–79 % correct classifications by means of conventional osteometric methods (Nikita 2021, 8; Hałuszko 2022, 157–160 tab. 8.2), which should allow us, with reservations, to build social-organisation hypotheses on this sort of data.

3 I would like to thank Arjan Louwen for pointing this out.

4 Among a group of 25 individuals, the expected value should be 13 men and 12 women according to the human sex ratio (1.05), while the observed figure is seven men and 18 women (0.38). There is statistical significance in this difference, although it is not very strong (chi-square test value = 3; $p = 0.08$).

https://doi.org/10.2369/9783869354439.beyond-urnfields

also the relationship between extensive forms of economy, such as cattle breeding, and the 'round mound'-form of monumentality in prehistoric northern Europe (Holst/Rasmussen 2013; Brozio et al. 2019).

Subsistence economy in Late Bronze Age ME Pomerania

There are substantial obstacles that prohibit the tracing of direct evidence for the pastoral mode of economy in the archaeological record, but a telling fact is that there are virtually no permanent settlements in ME Pomerania. Despite many rescue archaeology activities in Pomerania in recent years, we cannot name an example of a long-used settlement from Period III to early V that would consist of numerous storage facilities, permanent buildings, food procurement places, etc. (cf. Bukowski 1998, 194). Some recorded cases of short-lived settlements are, due to the state of preservation (or also because of their light construction), very modest in terms of archaeological, osteological and botanical sources (e.g. a settlement in Rębielcz, District Gdańsk, yielding less than 50 Bronze Age features and 122 fragments of pottery, of which only a part is connected with the Late Bronze Age phase of occupation; cf. Ostasz et al. 2011, 15–19). The scarcity of settlement structures results, of course, in a lack of direct osteological evidence for possible herding, since few settlements in ME Pomerania have yielded faunal assemblages. Unfortunately, funeral contexts in this area are also almost devoid of animal bones (cf. Abłamowicz/Kubiak 1999, map 1). Therefore, searching for indirect proof may prove useful.

Archaeobotany and palynology can provide direct proof of grain farming, although the former cannot help when there is a scarcity of cultural contexts (settlements) that could be sampled. However, the potential of pollen sources is significant, since the intensity of cereal pollen signals in the palynological record is negligible before 1000 BC in the discussed area (Ostoja-Zagórski 1989; Latałowa 1997; Dzięgielewski 2010, 177–178 fig. 3; Lamentowicz et al. 2019 [with the peak of cultivation a bit too early compared to archaeological evidence from the region]). With reference to the Warzenko and Siemirowice phases (1300–900 BC) in ME Pomerania, it is difficult to speak about a stable economy based on extensive agriculture and cereal cultivation, which are rarely confirmed in the palynological record or in the macroscopic botanical remains. This situation completely changes in the subsequent Władysławowo phase (after 900 BC; 2nd half of Period V – Period VI), which saw an extraordinary rise of permanent settlements across ME Pomerania. From this period on, a distinct trend can be seen in the economy of these areas toward the intensification of food production, with a still-important role for livestock, especially cattle and small ruminants. The availability of arable land combined with the intensification of agriculture was soon followed by a population growth after 900 BC. It is only from that period onwards that Pomeranian settlements resemble large, long-used habitation places, typical of an agricultural mode of economy, similar to those of the Lusatian culture in the areas south of Pomerania. These are smaller or larger settlement units with post buildings, storage pits (some containing huge amounts of grain) and food procurement areas, for example, in the form of clusters of hearths used for hot stone technology (boiling and cooking with heated stones), furnaces, and other structures (Dzięgielewski 2017, 303–304 fig. 4; see Fig. 3). Some of the excavated sites of this type were published in a satisfactory manner (see e.g. Fudziński/Ślusarska 2017; Dziechciarz 2018), but most of them are known from brief reports that only allow for general observations, in line with the picture presented here (e.g. Górska-Grabarczyk 2009; Koperkiewicz et al. 2009; Strobin/Molęda 2013; Żurawski 2014).

In the Władysławowo phase, a significant settlement expansion can be observed in the lowland belt of the Baltic coast, especially along the coast of the Bay of Gdańsk and the Pomeranian proglacial valleys (Grabowa, Reda-Łeba, lower Vistula or Noteć valley; cf. Fig. 1; Dzięgielewski 2017; 2018).

https://doi.org/10.2369/9783869354439.beyond-urnfields

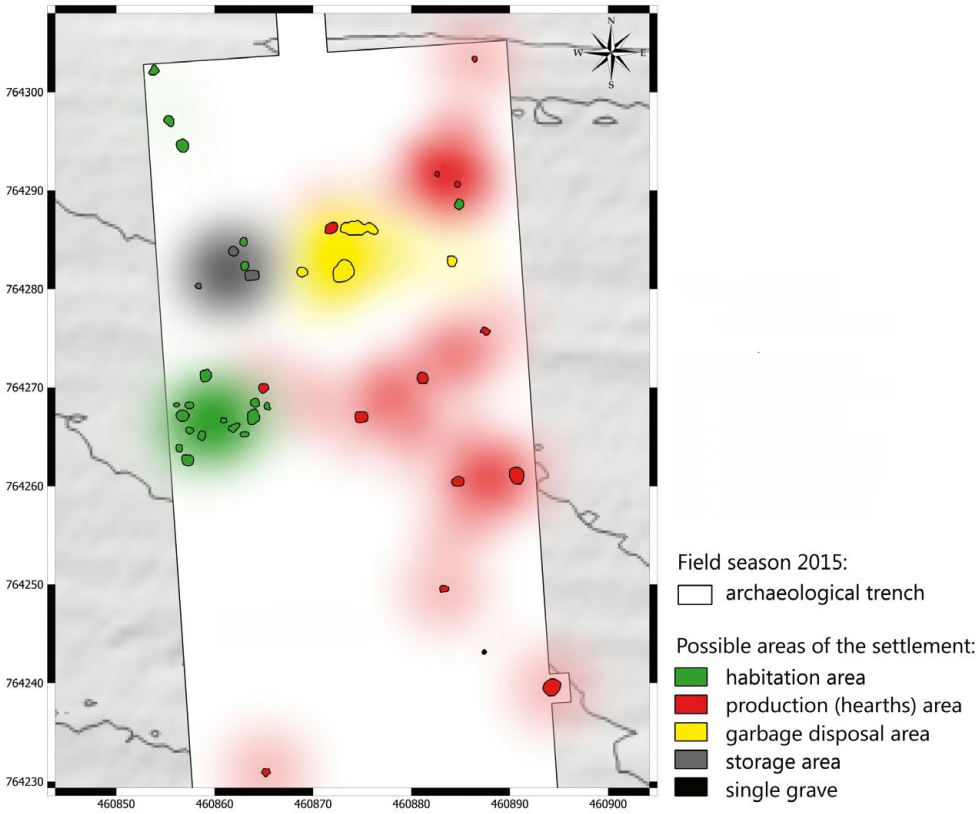


Fig. 3. Gnieżdżewo, site 4 (AZP 03-42/35), Puck District. The functional interpretation of the lay-out of a part of the Early Iron Age settlement (after Dziechciarz *2018; graphics P. Dziechciarz).*

The occupation of coastal areas and along the larger valleys opened up access to natural transport and communication routes that may have been used to intensify exchange contacts. But most important was the occupation of the coasts, which led to the 'rediscovery' of local amber. After the late Neolithic/Early Bronze Age episodes, there was probably a gap in the exploitation of amber on the southern Baltic coast. This is inferred from, among other things, the almost complete absence of settlement traces in the coastal zone during the Warzenko and Siemirowice phases (Dzięgielewski 2017, figs. 2–3). In contrast, from the Władysławowo phase onwards (i.e. after 900 BC) there are dense settlement complexes directly by the sea (Dzięgielewski 2017, fig. 3; examples of settlements and necropolises: Boege 1964; Andrzejowska 2004; Strobin/Molęda 2013; Dziechciarz 2018). We may also observe the rising evidence of an organised exchange of this raw material: from pits with amber deposits at some settlements (Wiącek 1979, 212: pit in Pruszcz Gdański with collected amber weighing 3.65 kg; Bukowski 2002, map IV) to concentrations of prestige goods along the presumed routes of exchange. At the same time, the demand for amber was increasing in the Early Hallstatt and Italian centres in the south (Kristiansen 1998; Tecco Hvala 2012 fig. 106; Chytráček et al. 2017). The intermediaries in this exchange were the then flourishing (especially in the HaC) Silesian-Greater Poland Lusatian groups with a strong Hallstatt culture influence, as well as the Moravian Horákov and Platěnice Hallstatt cultures (Chytráček et al. 2017, fig. 12; Dzięgielewski 2017; Michnik/Dzięgielewski 2022).

A quick survey of the set of Pomeranian agricultural tools also provides the same results with regard to the Late Bronze Age. The scarcity of (excavated) settlements from the Warzenko and Siemirowice phases seemingly prevents us from inferring a minor role of grain farming from the lack of tools, such as querns, grinders, or sickles. Querns, however, might have occurred in the stone con-

https://doi.org/10.2369/9783869354439.beyond-urnfields

structions of barrows. This phenomenon took place on a considerable scale indeed, but again only from the Władysławowo phase onwards. Symptomatically, in the west (e.g. in Mecklenburg-Western Pomerania, Germany) this phenomenon is already noticeable from Period III onwards (Janiak 2014, 212–215).

Similar remarks apply to bronze agricultural tools, especially sickles, and, to a lesser extent (because of their looser link with agricultural activity), to axes. Sickles are absent in ME Pomerania, not only from the (not numerous) settlements but also from hoards and single finds during Periods III and early V (cf. Gedl 1995; Bukowski 1998; Blajer 2001, maps 24–27). In the last phase of the Bronze Age (the Władysławowo phase), only one sickle type was encountered in this region, and this was a knobbed sickle of the Pomeranian type, according to Gedl's typology (*Knopfsicheln vom Pomerschen Typ*: Gedl 1995, 65–70, pl. 44B). This tool type is close to the Lusatian knobbed sickles; however, it is much smaller (always shorter than 10 cm) in which it resembles small Nordic sickles (Baudou 1960, 45). The larger Lusatian knobbed sickles are virtually absent here (Gedl 1995, pls. 42–43). The distribution of these harvesting tools in hoards is confined almost to the areas north of the Pomeranian morainic ridge, on the lower and more fertile patch of the coastal belt (Fig. 4). There are a handful of single finds of Pomeranian sickles as well (distributed almost similarly), but the entire collection from ME Pomerania is only under 40 items. Keeping in mind the usual inventories of the hoards deposited south of the Noteć river, in Greater Poland or Silesia (cf. Blajer 2001, 102–109), often with several dozen sickles in just one assemblage (e.g. Nowe Kramsko, Zielona Góra District, with 54 sickles preserved whole and 182 fragments; Orlicka-Jasnoch 2019), one has to realise the completely different cultural valourisation of this agricultural tool (or the cereal agriculture itself?) in the societies north of the Noteć river valley. This observation is corroborated by the fact that there are no pure hoards of agricultural tools in Pomerania; usually, small sickles or axes are just an addition to different categories of utensils.

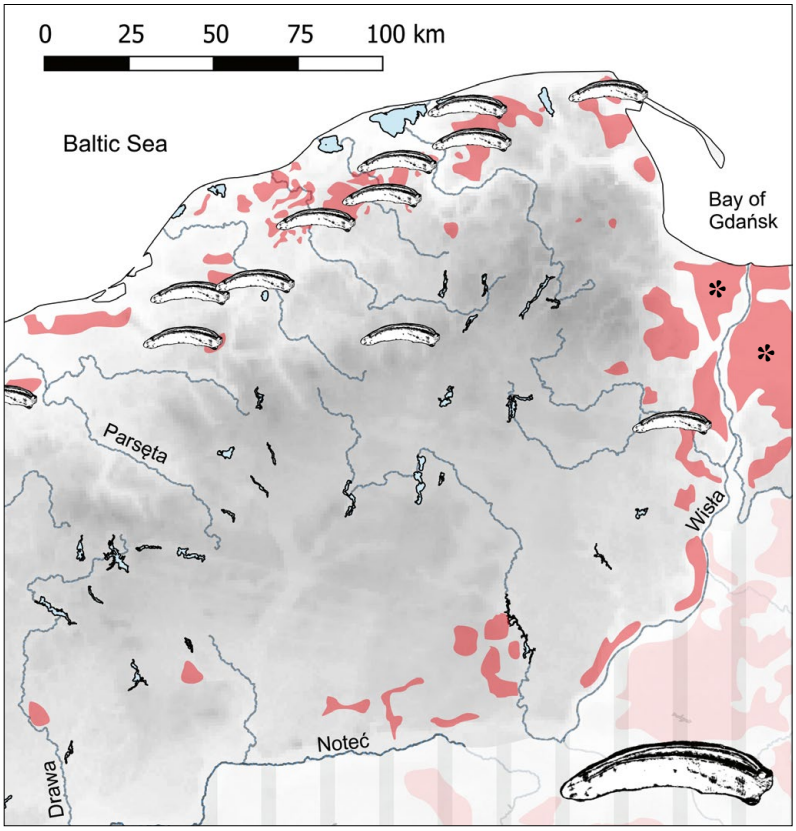


Fig. 4. Distribution of Pomeranian-type knobbed bronze sickles in hoards in middle and eastern Pomerania on the background of the distribution of the soils currently classified as the most fertile (most suitable for wheat cultivation – pale red; ✻ = not available in the past; soil data according to Niedziółka 2018b and the Institute of Soil Science and Plant Cultivation; graphics K. Dzięgielewski).

https://doi.org/10.2369/9783869354439.beyond-urnfields

As for socketed axes, we can see a clear evolution from larger forms derived from the south (Lusatian types) towards the shorter Kopaniewo type, which resembles the Nordic short *Tüllenbeile* (Kuśnierz 1998, 26, 59). These axes are the only genuine local type of axe, which clearly differs from the 'core' Lusatian culture areas with their great variety of local variants of socketed axes (Kuśnierz 1998). Small Kopaniewo axes are distributed, along with only a few finds of imported axes (of western European, north German, Silesian/Greater Poland, or eastern Baltic types), in a manner quite similar to the sickles.

On the other hand, the Lusatian culture hoards south of the Noteć river usually lacked one of the prominent elements present in Pomeranian hoards: the horse harness. The sets from ME Pomeranian hoards rarely include 'technical' elements of bridles, such as bits or cheek-pieces, but mostly consist of ornaments, such as sumptuous phalerae sets or jingle plates (Fig. 5). These characteristics are shared with other south Baltic communities (Lampe 1982; Bukowski 1998; Szczurek/Kaczmarek 2022 fig. 49).

Looking at the chronology of the occurrence of the two groups (horse-gear and agricultural tools) in hoards, one can observe a striking negative correlation. The former are mostly related to the older phase of hoard deposition (Period V = HaB2–HaB3a, i.e. the Siemirowice phase and the older stage of the Władysławowo phase).[5] In contrast, sickles are connected only to the Władysławowo phase

Fig. 5. Inventory of the Charzykowy hoard (mid-Period V) (after Rząska/Walenta 2017, 81).

5 A few exceptions to this rule occur in middle Pomerania, e.g. the Kaliska II horse harness/militaria hoard, which probably dates to the turn of HaB3/HaC (Szczurek/Kaczmarek 2022).

https://doi.org/10.2369/9783869354439.beyond-urnfields

(Period V/VI = HaB3b–HaC1), when most other indicators of a mobile way of life/pastoralism, e.g. the important role of the horse, barrows, polygyny-related structure of burials, or the low share of cultivars in pollen spectra, have already disappeared.

In this context, it is worth mentioning a unique find, one of the very few direct archaeozoological proofs for the use of animals in ritual and prestige signalling in the Late Bronze Age, Period V – the horse burial in one of the mounds at the barrow necropolis in Dolice (western Pomerania). The animal was cremated and buried whole in a pit located close to the main chamber of one of the largest and most complex barrows (no. VII), prior to the construction of its stone and earth core covering the wooden and stone chamber (Kaczmarek 2015, pl. 82–95; Osypińska 2015). This is another confirmation of the special role of horses among the Pomeranian Late Bronze Age societies. At the same time, it provides confirmation that the horse was treated like a human being at this time, which is typical of the era preceding the ontological turn of the early Iron Age, which led ultimately to the separation of the human and natural worlds (cf. Kveiborg 2020).

Connections to the south, north or west?

Classical dialectics in reconstructions of Pomeranian connections in the Late Bronze Age suggested the north (the Nordic Circle, Nordic Bronze Age, *die Südzone des Nordischen Kreises*) or the south (the Lusatian culture, *kultura łużycka*) as the main and decisive directions of contacts. This dichotomy was dependent on the sort of material culture used to trace connections: the stylistic provenance of bronzes (Sprockhoff 1931; 1956; Fogel 1988) or the pottery (Kostrzewski 1958). Recent re-assessments of the 'import' status of hoard inventories have shown that most of them were made locally, regardless of the fact that their prototypes came from the lower Oder river basin in present-day northern Germany, Silesia, or Greater Poland. A re-assessment of import status was carried out by, for example, proving local production of some 'foreign' forms. For example, Bugaj's research on antennae swords (Bugaj 2005) has shown that most of the local forms of this type of full-hilted swords are made by casting grips on tanged blades (*Griffangelschwerter*), which were previously regarded as one of the most reliable types of Nordic imports (Sprockhoff 1956, map 1; Kostrzewski 1958, 148; Fogel 1988, 69; Bukowski 1998, 269, who also allowed for the possibility of their local production based on Nordic patterns). When complex grips were produced and cast locally, there is no reason to think that the not-so-sophisticated blades were imported. In the Gdańsk-Oliwa hoard, this is also supported by the fact that the chemical composition of the blade alloy is similar to the Cu-Sn-Pb-Sb (*Fahlerz*) alloys of the local ornaments from this assemblage (Fig. 6).

Tracing the local stylistics (the local production-distribution circles) of the other categories of bronzes produced similar outcomes (Dzięgielewski in prep.). As a result, a figure of just one tenth of almost 2,000 bronzes from Pomerania are now regarded as genuine imports. Among these actually imported goods, only a fraction came from the core of the Nordic Circle, the area which was indicated most frequently as a source of bronzes in Pomerania in older research (Fogel 1988). The most important direction of the bronze exchange turns out to be west. Most of the distribution maps of imported goods resemble the pattern recognised, e.g. for the Lenzersilge-Darsekau socketed axes (Fig. 7). The true Nordic imports are extremely rare, forming only up to 2 % of all bronze items in ME Pomerania (Dzięgielewski in prep.). For example, a few hanging vessels were found in just three deposits that also contain other imported goods (e.g. Witkowo, Kaliska I) but are not necessarily structured in the selected manner typical of the Nordic Bronze Age. This seems to testify that they were not deposited by individuals who were aware of the 'proper way' of their ritual use (cf. Heske 2012), or the purpose of deposition was different. Therefore, it can be assumed that a handful of highly elaborated bronze items found their way to ME Pomerania in a different role than in the 'core'

https://doi.org/10.2369/9783869354439.beyond-urnfields

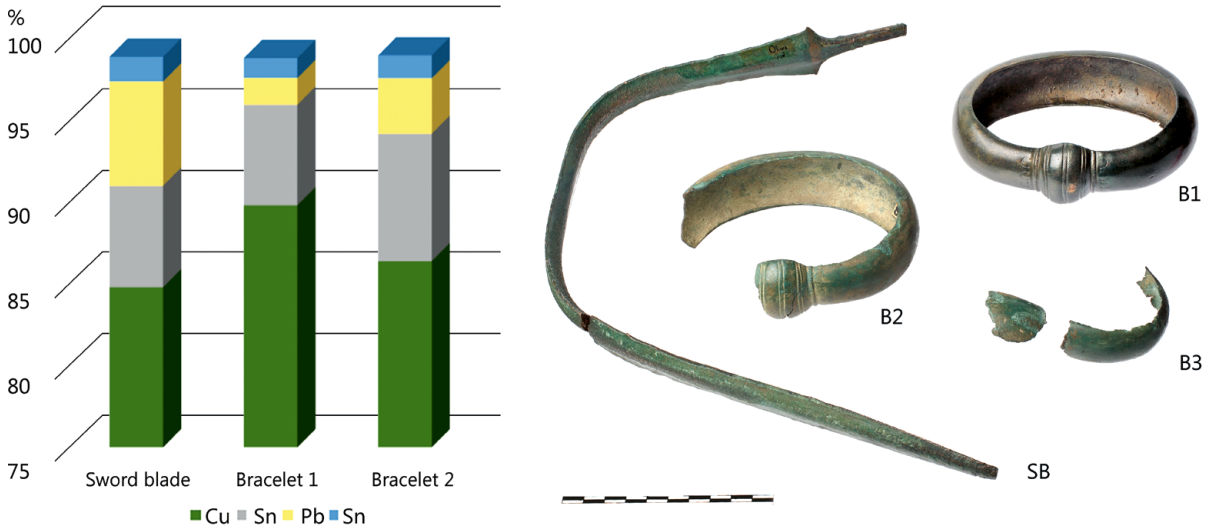


Fig. 6. General comparison of the chemical composition of artefacts from the Gdańsk-Oliwa hoard, according to the results of the XRF examination (analysis by M. Biborski; photo after Dzięgielewski *2017; graphics K. Dzięgielewski).*

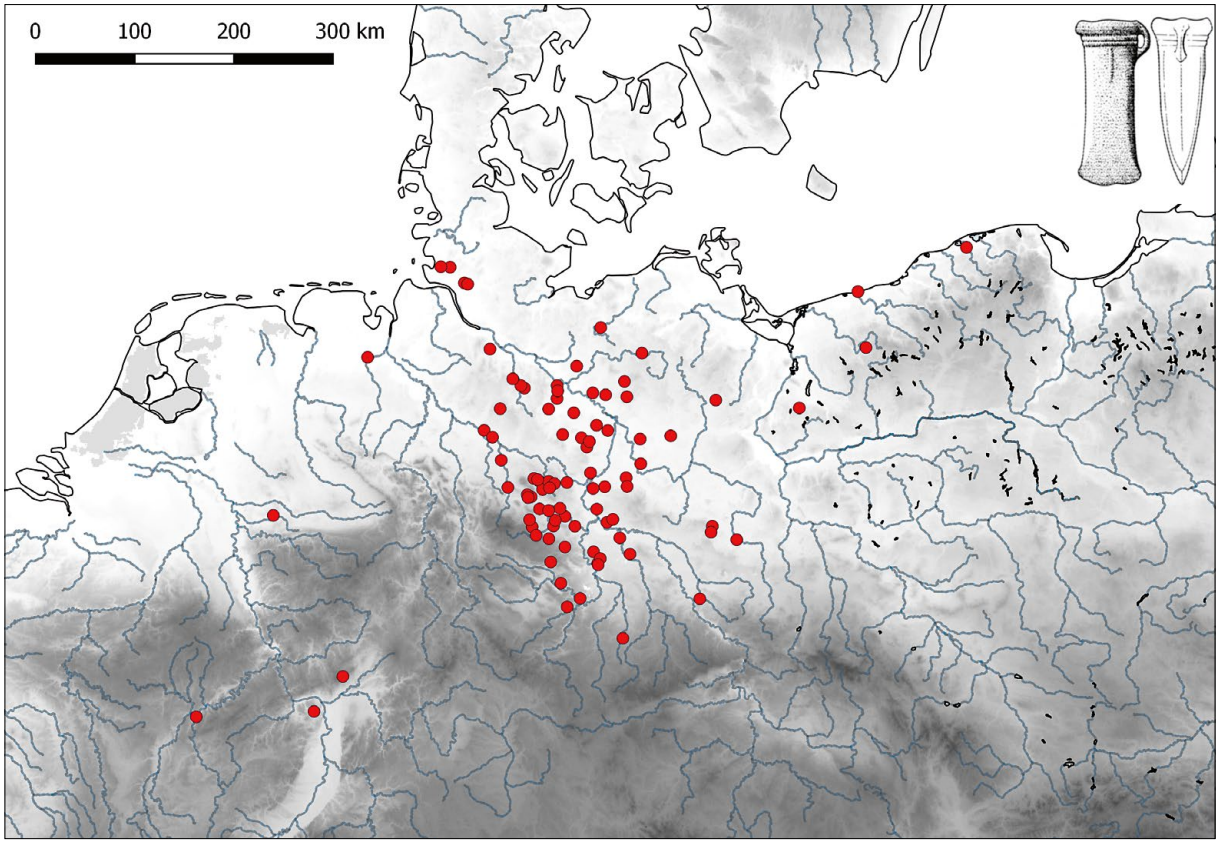


Fig. 7. Distribution chart of the Lenzersilge-Darsekau-type socketed axes (variants Klein Hesebeck, Offensen, Watenstedt, and Gross Sachau defined by Laux *2005; graphics K. Dzięgielewski).*

Nordic regions. Moreover, some stylistic details hint at their provenance being more in the southeast zone of the Nordic Circle (the mouth of the lower Odra/Oder river region included) and not the 'core' Danish region (Sprockhoff/Höckmann 1979, 24–26).

https://doi.org/10.2369/9783869354439.beyond-urnfields

Of course, this does not mean that the Pomeranian metalwork was completely genuine. Some real Nordic imports (e.g. plate fibulae) might be indicated here as prototypes for later local developments. The details of the process of assimilation of western patterns in metalwork can be illustrated by the example of kidney-shaped bracelets. These started to appear as western prototypes (a few specimens of the Thuringian type from the Witkowo and Kaliska I hoards; Sprockhoff 1956, 188; Kaczmarek et al. 2021, 90–92), then they were creatively elaborated in Pomerania (Schwennenz/Oder type, Kalisz Pomorski type, Rytel/Weichsel type, Gdańsk-Oliwa type), and they ended up as single Pomeranian imports in the far west, in Lower Saxony (Tackenberg 1971, 220). This example shows that Late Bronze Age Pomerania was a separate metallurgical province, developing a genuine local style and drawing inspiration mainly from the west (the southern zone of the Nordic Circle or even from the western end of 'the Nordic rainbow', to use Butler's [1986] metaphor). To a lesser extent, these inspirations were drawn from other directions (e.g. the Lusatian urnfields). There is much to suggest that sources of raw materials for bronze production were also to be sought in the west (Dzięgielewski 2017, 305). This is in contrast to the 'core' Lusatian areas, where both stylistic inspiration as well as raw materials were derived rather from the south (Blajer et al. 1998; Przybyła 2009; Kaczmarek 2012; Nowak et al. 2022).

The (short) life-span of urnfields

Although cremation was present in Pomerania from Period III without exception, the full-range Urnfield cultural model cannot be applied to local societies from such an early date (Dzięgielewski 2017). The typical traits of this model, such as large, long-used flat cemeteries, durable settlement structures (with settlements provided with storage facilities), a full range of cereal agriculture, a monogamous family structure, and a regional dress style, can be traced back in Pomerania only to the end of Period V (HaB3), from approximately 900 BC onwards. Among other changes, the above-mentioned general shift in settlement from the moraine ridge toward the lower, more fertile soils in the coastal belt was then observed (cf. Fig. 1; Bukowski 1998; Dzięgielewski 2017).

This was precisely the time and place in which bronze sickles started to appear in hoards and as single finds, along with the socketed axes of various types. Although the sickles were not as large (and useful?), and not as numerous as in the Lusatian south, they strongly support the thesis of the emergence of a new attitude towards the agricultural sphere. At the same time, there were noticeable direct signals of agriculture, such as storage pits, some full of charred grain (mostly barley; cf. Klichowska 1979; Dzięgielewski 2017; Fudziński/Ślusarska 2017), as well as an increased palynological signal of cultivated plants (Latałowa 1997; Dzięgielewski 2010). At the same time, the family models were probably adjusted to the agricultural norm of monogamy (Dzięgielewski 2017; cf. Przybyła 2013). Taxonomically, these changes are to be correlated with the newly founded, mostly flat cemeteries of the Władysławowo phase, that is, with the second half of Period V and the beginning of Period VI.

However, the period of dominance of these economic strategies and social models was short-lived in ME Pomerania; the first indications of a return to more mobile forms of socio-economic organisation were already emerging during the younger stage of the Władysławowo phase (during HaC). This found its full expression in the so-called 'classic phase of the Pomeranian culture' (the Karczemki phase), when the increasing role of ruminant husbandry, the horse and mobility started to re-appear, hand in hand with the polygamic mating system and a less stable settlement structure (Dzięgielewski 2016; 2017).

https://doi.org/10.2369/9783869354439.beyond-urnfields

The package of cultural characteristics typical for central European Urnfield cultures (stable settlement, intensive agriculture based on cereal cultivation, monogamous family structure, large, long-used cemeteries with flat burials, etc.) reached middle and especially eastern Pomerania very late, only at the end of the Bronze Age (900–800 BC). The old barrow cemeteries such as Siemirowice or Stężyca were abandoned then, although barrow construction was present in some isolated regions up to the end of the Early Iron Age (Janiak 2014).

There is no doubt that in some areas of culture, such as the organisation of settlement structures, that is, open settlements located around a large commonly-used cemetery (in the Władysławowo phase) or the pottery stylistics (in the Warzenko and Siemirowice phases), the communities of Late Bronze Age Pomerania were similar to groups occupying other regions of the Lusatian culture or, more broadly, the 'Urnfield world'.[6] However, in general they led a different way of life. A pronounced role of the horse, visible in the high valourisation of the horse harness in hoarding rituals, and the accompanying low valourisation of agricultural tools are in line with the weak signals of agriculture during most of the Late Bronze Age. In contrast to the south, the dominant subsistence strategy was probably the herding of cattle and small ruminants. The barrow-building Pomeranian societies of the time were mobile, and the change to a more settled way of life, which Scandinavia had seen at the turn of the Middle and Late Bronze Ages (Rasmussen 2018), took place much later here, at the Late Bronze Age/Early Iron Age transition. As it turned out, it was not an optimal and evolutionary stable strategy in this case, since there was soon a return (in the younger part of the Early Iron Age; HaD) to more mobile and loose forms of economic and social organisation (Dzięgielewski 2017; 2018; for different views see: Ślusarska 2017; Kneisel 2018).

The contacts of Pomerania with the north (and northwest) at the end of the Bronze Age were bilateral and based on mutually intertwined forms of exchange: the trade of raw materials necessary for the production of bronze, mainly prestige, items, the exchange of gifts in the form of finished objects, and matrimonial exchange, which was reflected, among other things, in the spread of the Lusatian pottery style in Scandinavia (Dąbrowski 1987; Kaliff 2001, 51; Dzięgielewski et al. 2010, 21). At that time, a kind of unification of the areas of the western and southern Baltic Sea coast took place in the general rules of bronze metallurgy and its consumption, while preserving local specificity. To a lesser extent, it touched on the field of ceramic production. Some aspects of spiritual culture and social ideology were also mutually understood (house urns being one of the best examples: Sabatini 2007; Kneisel 2016; Niedziółka 2018a), while others, for instance, a proper use of hanging vessels (Heske 2012), were probably not. During the Late Bronze Age, the most important direction of economic and cultural contacts of Pomerania was to the west. Contacts may have been maintained in part along the coast (by land or by sea). The basic objective of the exchange was raw bronze (in the form of ingots) and, to a lesser extent, finished products. Only during the HaC1 phase did a partial reorientation of the direction of contacts occur. The route from eastern Pomerania, in the knee region of the Noteć river, to the south (cf. Fig. 1), and along the meridian course of the Warta river, became active. Southern iron (initially in the form of finished products) was added to the repertoire of exchanged raw materials.

The cultural peculiarities of the Late Bronze Age east Pomeranian community outlined above, concerning deep layers of social organisation, economic foundations, and the orientation of contact networks, contributed to the appearance of the phenomenon of the Pomeranian culture, which found full expression in the younger part of the Early Iron Age.

6 For examples of the settlement model of the Urnfield culture with the central role of the long-used urnfield, see e.g. Gedl 1992; Van Beek/Louwen 2012.

https://doi.org/10.2369/9783869354439.beyond-urnfields

Bibliography

Abłamowicz/Kubiak 1999: R. Abłamowicz/H. Kubiak, Analiza osteologiczna szczątków zwierzęcych z cmentarzysk kultury łużyckiej w dorzeczu Odry i Wisły (Katowice 1999).

Adamik 2012: J. Adamik, Idea skrzyni kamiennej jako formy grobu na terenie ziem polskich w późnej epoce brązu i wczesnej epoce żelaza. Collectio Archaeologica Ressoviensis 18 (Rzeszów 2012).

Andrzejowska 2004: M. Andrzejowska, Cmentarzyska w Wielkiej Wsi i Swarzewie w świetle kartoteki Carla-Axela Moberga. Pruthenia Antiqua 1, 2004, 227–271.

Anthony 2007: D. W. Anthony, The Horse, the Wheel, and Language. How Bronze-Age Riders from the Eurasian Steppes Shaped the Modern World (Princeton 2007).

Baudou 1960: E. Baudou, Die regionale und chronologische Einteilung der jüngeren Bronzezeit im Nordischen Kreis. Acta Universitatis Stockholmiensis 1 (Göteborg, Uppsala 1960).

Van Beek/Louwen 2012: R. Van Beek/A. Louwen, Urnfields on the move. Testing burial site-settlement relations in the eastern Netherlands (c. 1100–500 BC). Archäologisches Korrespondenzblatt 42, 2012, 41–60.

Boege 1964: W. Boege, Das früheisenzeitliche Gräberfeld von Hohenlinde, Kreis Stolp. In: H. J. Eggers (ed.), Pommersche Funde und Ausgrabungen aus den 30er und 40er Jahren. Tafelband. Beiheft zum Atlas der Urgeschichte 10 (Hamburg 1964) 96–108.

Blajer 2001: W. Blajer, Skarby przedmiotów metalowych z epoki brązu i wczesnej epoki żelaza na ziemiach polskich (Kraków 2001).

Blajer et al. 1998: W. Blajer/A. Kowalska/W. Reczyński, The bronze artefacts of the Upper Vistula River-Basin. An archeometric approach. Materiały Archeologiczne 31, 1998, 65–80.

Brozio et al. 2019: J. P. Brozio/J. Müller/M. Furholt/W. Kirleis/S. Dreibrodt/I. Feeser/W. Dörfler/M. Weinelt/H. Raese/A. Bock, Monuments and economies: What drove their variability in the middle-Holocene Neolithic? The Holocene, 29(10), 2019, 1558–1571. https://doi.org/10.1177/0959683619857227.

Bugaj 2005: M. Bugaj, Ośrodki produkcji mieczy antenowych w Polsce. Przegląd Archeologiczny 53, 2005, 87–142.

Bukowski 1998: Z. Bukowski, Pomorze w epoce brązu w świetle dalekosiężnych kontaktów wymiennych. Monografie Gdańskiego Towarzystwa Naukowego 104 (Gdańsk 1998).

Bukowski 2002: Z. Bukowski, Znaleziska bursztynu w zespołach z epoki brązu i wczesnej epoki żelaza z dorzecza Odry oraz Wisły (Warszawa 2002).

Butler 1986: J. J. Butler, Drouwen: end of a 'Nordic' rainbow? Palaeohistoria 28, 1986, 133–168.

Chamberlain 2006: A. Chamberlain, Demography in Archaeology. Cambridge Manuals in Archaeology (Cambridge 2006).

Chytráček et al. 2017: M. Chytráček/M. Golec/O. Chvojka/M. Metlička/J. Michálek/M. Novotná/D. Fröliková, Jantar starší doby železné a průběh jantarové stezky ve střední Evropě. Památky Archeologické 108, 2017, 121–256.

Cieśliński/Kasprzak 2020: A. Cieśliński/A. Kasprzak, Nowy Łowicz. Archeologiczna Atlantyda w sercu poligonu drawskiego/Nowy Łowicz. Archaeological Atlantis in the heart of the Drawsko Training Area (Oleszno, Warszawa, Koszalin, Drawsko Pomorskie 2020).

Dąbrowski 1980: J. Dąbrowski, Przydatność ceramiki łużyckiej dla podziałów kulturowych. In: M. Gedl (ed.), Zróżnicowanie wewnętrzne kultury łużyckiej (Die innere Gliederung der Lausitzer Kultur). Materiały z konferencji zorganizowanej w ramach problemu resortowego R.III.6 „Pradzieje Polski na tle porównawczym" (Kraków 1980) 35–55.

Dąbrowski 1987: J. Dąbrowski, Die Lausitzer Kultur und der Nordische Kreis. In: Die Urnenfelderkulturen Mitteleuropas. Symposium Liblice, 21.–25.10.1985 (Praha 1987) 71–78.

Dąbrowski 2009: J. Dąbrowski, O nowym pojmowaniu łużyckich jednostek kulturowych (na przykładzie materiałów tarnobrzeskich). In: S. Czopek/K. Trybała-Zawiślak (eds.), Tarnobrzeska kultura łużycka – źródła i interpretacje. Collectio Archaeologica Ressoviensis 11 (Rzeszów 2009) 33–40.

Dziechciarz 2018: P. Dziechciarz, Gnieżdżewo, stanowiska 1 i 4. Osady z przełomu epok brązu i żelaza na Pomorzu Wschodnim. Ocalone Dziedzictwo Archeologiczne, Miniatury 3 (Pękowice, Warszawa, Gdańsk 2018).

Dzięgielewski 2010: K. Dzięgielewski, Expansion of the Pomeranian culture in Poland during the Early Iron Age: remarks on the mechanism and possible causes. In: K. Dzięgielewski/M. S. Przybyła/A. Gawlik (eds.), Migration in Bronze and Early Iron Age Europe. Prace Archeologiczne 63 (Kraków 2010) 173–196.

Dzięgielewski 2016: K. Dzięgielewski, Societies of the younger segment of the early Iron Age in Poland (500–250 BC). In: A. Rzeszotarska-Nowakiewicz (ed.), The Past Societies. Polish lands from the first evidence of human presence to the early Middle Ages 4: 500 BC–500 AD (Warszawa 2016) 15–48.

Dzięgielewski 2017: K. Dzięgielewski, Late Bronze and Early Iron Age communities in the northern part of the Polish Lowland (1000–500 BC). In: U. Bugaj (ed.), The Past Societies. Polish lands from the first evidence of human presence to the early Middle Ages 3: 2000–500 BC (Warszawa 2017) 295–340.

Dzięgielewski 2018: K. Dzięgielewski, "Bernsteinherren" or humble amber gatherers? Notes on social organisation in Eastern Pomerania during the Early Iron Age. In: M. Trefný (ed.), The Early Iron Age in Central Europe. Proceedings of the conference held on the 2nd–4th of July 2015 in Hradec Králové, Czech Republic/Die frühe Eisenzeit in Mitteleuropa. Sammelband von der Tagung, abgehalten am 2.–4. Juli 2015 in Hradec Králové, Tschechische Republik (Hradec Králové 2018) 78–91.

Dzięgielewski in prep.: K. Dzięgielewski, Transformacje kulturowe na przełomie epoki brązu i epoki żelaza na Pomorzu Wschodnim (Cultural transformations at the turn of Bronze and Iron Ages in east Pomerania).

Dzięgielewski et al. 2010: K. Dzięgielewski/M. S. Przybyła/A. Gawlik, Reconsidering migration in Bronze Age Europe: bridging a gap in European mobility? In:

https://doi.org/10.2369/9783869354439.beyond-urnfields

K. Dzięgielewski/M. S. Przybyła/A. Gawlik (eds.), Migration in Bronze and Early Iron Age Europe. Prace Archeologiczne 63 (Kraków 2010) 9–35.

Fogel 1979: J. Fogel, Siły zbrojne ludności kultury łużyckiej (struktura – organizacja – wartość bojowa). Materiały Zachodniopomorskie 25, 1979, 7–51.

Fogel 1988: J. Fogel, „Import" nordyjski na ziemiach polskich w schyłku epoki brązu. Uniwersytet Adama Mickiewicza w Poznaniu, Seria Archeologia 30 (Poznań 1988).

Fortunato/Archetti 2010: L. Fortunato/M. Archetti, Evolution of monogamous marriage by maximization of inclusive fitness. Journal of Evolutionary Biology 23, 2010, 149–156.

Fudziński/Ślusarska 2017: P. Fudziński/K. Ślusarska, Ośrodek starożytnego brązownictwa pomorskiego we wczesnej epoce żelaza w Juszkowie, gmina Pruszcz Gdański (Gdańsk 2017).

Gedl 1975: M. Gedl, Kultura łużycka (Kraków 1975).

Gedl 1990: M. Gedl, Początki i zróżnicowanie regionalne kultury łużyckiej na Pomorzu. In: T. Malinowski (ed.), Problemy kultury łużyckiej na Pomorzu (Słupsk 1990) 25–51.

Gedl 1992: M. Gedl, Besiedlungsdynamik in der Spätbronzezeit an der Liswarta im Westteil Kleinpolens. Archäologisches Korrespondenzblatt 22(4), 1992, 493–501.

Gedl 1995: M. Gedl, Die Sicheln in Polen. Prähistorische Bronzefunde XVIII/4 (Stuttgart 1995).

Gocman 2021: U. Gocman, Livestock subsistence strategies in the Middle and Late Bronze Age Lesser Poland. Environmental Archaeology, 2021. https://doi.org/10.1080/14614103.2021.1953936.

Górska-Grabarczyk 2009: B. Górska-Grabarczyk, Nowe materiały do poznania przełomu epoki brązu i wczesnej epoki żelaza w Borach Tucholskich. In: M. Fudziński/H. Paner/S. Czopek (eds.), Nowe materiały kultury łużyckiej i pomorskiej z Pomorza (Gdańsk 2009) 63–70.

Hałuszko 2022: A. Hałuszko, Analizy bioarcheologiczne szczątków kostnych z pochówków szkieletowych i ciałopalnych ze Świbia. In: M. Michnik/K. Dzięgielewski, Cmentarzysko z wczesnej epoki żelaza w Świbiu na Górnym Śląsku 2 (Gliwice 2022) 152–172.

Harding 2000: A. Harding, European Societies in the Bronze Age (Cambridge 2000).

Hensel 1988: W. Hensel, Polska starożytna (Wrocław, Warszawa, Kraków, Gdańsk, Łódź ^{3}1988).

Heske 2012: I. Heske, Ritual knowledge: the production, distribution and deposition of Late Bronze Age hanging vessels. Archaeologia Baltica 18, 2012, 43–58.

De Hingh 2000: A. E. De Hingh, Food production and food procurement in the Bronze Age and Early Iron Age (2000–500 BC). The organization of a diversified and intensified agrarian system in the Meuse-Demer-Scheldt region (The Netherlands and Belgium) and the region of the River Moselle (Luxemburg and France) (Leiden 2000).

Holst/Rasmussen 2013: M. K. Holst/M. Rasmussen, Herder Communities: Longhouses, Cattle and Landscape Organization in the Nordic Early and Middle Bronze Age. In: S. Bergerbrant/S. Sabatini (eds.), Counterpoint: Essays in Archaeology and Heritage Studies in Honour of Professor Kristian Kristiansen. BAR International Series 2508 (Oxford 2013) 99–110.

Janiak 2014: R. Janiak, Kurhany z młodszych okresów epoki brązu i wczesnej epoki żelaza na Pojezierzu Kaszubskim (Łódź 2014).

Kaczmarek 2012: M. Kaczmarek, Epoka brązu na Nizinie Wielkopolsko-Kujawskiej w świetle interregionalnych kontaktów wymiennych. Prace Komisji Archeologicznej PTPN 28 (Poznań 2012).

Kaczmarek 2015: M. Kaczmarek, Dolice. Cmentarzyska kurhanowe z późnej epoki brązu na Pomorzu Zachodnim/Dolice. Barrow cemeteries from the Late Bronze Age in Western Pomerania. Hyperborea. Poznańskie studia nad epoką brązu i wczesną epoką żelaza 1 (Poznań 2015).

Kaczmarek 2017: M. Kaczmarek, The snares of ostensible homogeneity. Lusatian Culture or Lusatian Cultures? In: U. Bugaj (ed.), The Past Societies. Polish lands from the first evidence of human presence to the early Middle Ages 3: 2000–500 BC (Warszawa 2017) 263–293.

Kaczmarek et al. 2021: M. Kaczmarek/G. Szczurek/A. Krzysiak, Kaliska I. Skarb przedmiotów metalowych z późnej epoki brązu na Pomorzu / Kaliska I. The Late Bronze Age Metal Hoard from Pomerania. Hyperborea. Poznańskie studia nad epoką brązu i wczesną epoką żelaza 6 (Poznań 2021).

Kaliff 2001: A. Kaliff, Gothic Connections. Contacts Between Eastern Scandinavia and the Southern Baltic Coast 1000 BC–500 AD. Occasional Papers in Archaeology 26 (Uppsala 2001).

Klichowska 1979: M. Klichowska, Zboże z osady z przełomu epoki brązu i żelaza w Juszkowie, gm. Pruszcz Gdański. Pomorania Antiqua 8, 1979, 141–154.

Kneisel 2012: J. Kneisel, Anthropomorphe Gefäße in Nord- und Mitteleuropa während der Bronze- und Eisenzeit. Studien zu den Gesichtsurnen. Kontaktzonen, Chronologie und sozialer Kontext. Studien zur Archäologie in Ostmitteleuropa/Studia nad Pradziejami Europy Środkowej 7.1–2 (Bonn 2012).

Kneisel 2016: J. Kneisel, Spreading ideas: Late Bronze Age face-urn burials across Northern Europe and the Baltic Sea. In: A. L. Melheim/H. Glørstad/Z. Tsigaridas Glørstad (eds.), Comparative Perspectives on Past Colonisation, Maritime Interaction and Cultural Integration (Oslo 2016) 219–233.

Kneisel 2018: J. Kneisel, Face urns in different social contexts – Patrilinear patterns versus equality? In: S. Boddum/N. Terkildsen (eds.), Status og samfundsstruktur i yngre bronzealders kulturlandskab. Yngre bronzealders kulturlandskab 6 (Viborg, Holstebro 2018) 183–200.

Koperkiewicz et al. 2009: A. Koperkiewicz/P. Lewandowski/J. Nowacka/J. Różycki/K. Ślusarska, Wstępne wyniki badań ratowniczych na trasie obwodnicy Słupska. Osadnictwo cyklu łużycko-pomorskiego na stanowiskach Redzikowo 12, 13, 14. In: M. Fudziński/H. Paner/S. Czopek (eds.), Nowe materiały kultury łużyckiej i pomorskiej z Pomorza (Gdańsk 2009) 181–186.

Korczyńska et al. 2019: M. Korczyńska/M. Lityńska-Zając/M. Moskal-del Hoyo, Eig'ner Herd ist Goldes Wert. Ein aussergewöhnlicher früheisenzeitlicher Befund

https://doi.org/10.2369/9783869354439.beyond-urnfields

aus der Siedlung in Janowice, Fdst. 6 (AZP 106-65/61), polnische Westkarpaten. Študijné Zvesti Archeologického ústavu Slovenskej Akadémie Vied, Supplementum 1, 2019, 299–327.

Kostrzewski 1958: J. Kostrzewski, Kultura łużycka na Pomorzu (Poznań 1958).

Kristiansen 1998: K. Kristiansen, Europe before History (Cambridge 1998).

Kveiborg 2020: J. Kveiborg, Together or Apart? Identifying Ontologies in the Nordic Bronze and Iron Age through the Study of Human-Horse Relationships. In: K. I. Austvoll/M. H. Eriksen/P. D. Fredriksen/L. Melheim/L. Prøsch-Danielsen/L. Skogstrand (eds.), Contrasts of the Nordic Bronze Age: Essays in Honour of Christopher Prescott. The Archaeology of Northern Europe 1 (Turnhout 2020) 115–126.

Kwapiński 1999: M. Kwapiński, Korpus kanop pomorskich. Część I – Pomorze (Gdańsk 1999).

Kuśnierz 1998: J. Kuśnierz, Die Beile in Polen III (Tüllenbeile). Prähistorische Bronzefunde IX/21 (Stuttgart 1998).

Lachowicz 1968: F. J. Lachowicz, Cmentarzysko kurhanowe w Grabowie, pow. Bytów, stanowisko 1. Materiały Zachodniopomorskie 14, 1968, 9–125.

Lamentowicz et al. 2019: M. Lamentowicz/P. Kołaczek/D. Mauquoy/P. Kittel/E. Łokas/M. Słowiński/V. E. J. Jassey/K. Niedziółka/K. Kajukało-Drygalska/K. Marcisz, Always on the tipping point. A search for signals of past societies and related peatland ecosystem critical transitions during the last 6500 years in N Poland. Quaternary Science Reviews 225, 2019, 105954. https://doi.org/10.1016/j.quascirev.2019.105954.

Lampe 1982: W. Lampe, Ückeritz. Ein jungbronzezeitlicher Hortfund von der Insel Usedom. Beiträge zur Ur- und Frühgeschichte der Bezirke Rostock, Schwerin und Neubrandenburg 15 (Berlin 1982).

Latałowa 1997: M. Latałowa, Wpływ osadnictwa epoki brązu i wczesnej epoki żelaza na późnoholoceńską historię lasów na Pomorzu. In: W. Fałtynowicz/M. Latałowa/J. Szmeja (eds.), Dynamika i ochrona roślinności Pomorza. Materiały z sympozjum, Gdańsk, 28–30 września 1995 r. (Gdańsk, Poznań 1997) 113–124.

Laux 2005: F. Laux, Die Äxte und Beile in Niedersachsen II (Lappen- und Tüllenbeile, Tüllenmeißel und -hämmer). Prähistorische Bronzefunde IX/25 (Stuttgart 2005).

Łuka 1971: L. J. Łuka, Obrządek pogrzebowy i wierzenia u plemion kultury wschodniopomorskiej na Pomorzu Gdańskim – część II. Pomorania Antiqua 3, 1971, 21–100.

Malinowski 1969: T. Malinowski, Obrządek pogrzebowy ludności kultury pomorskiej (Wrocław 1969).

Michnik/Dzięgielewski 2022: M. Michnik/K. Dzięgielewski, Cmentarzysko z wczesnej epoki żelaza w Świbiu na Górnym Śląsku 2 (Gliwice 2022).

Niedziółka 2018a: K. Niedziółka, Eastern Pomerania: from cloistered periphery to initial zone of new cultural values. In: M. Trefný (ed.), The Early Iron Age in Central Europe. Proceedings of the conference held on the 2nd–4th of July 2015 in Hradec Králové, Czech Republic/Die frühe Eisenzeit in Mitteleuropa. Sammelband von der Tagung, abgehalten am 2.–4. Juli 2015 in Hradec Králové, Tschechische Republik (Hradec Králové 2018) 92–109.

Niedziółka 2018b: K. Niedziółka, Próba oceny przydatności danych AZP do badań osadniczych. Przykład Pomorza Wschodniego na przełomie epok brązu i żelaza. Śląskie Sprawozdania Archeologiczne 60(1), 2018, 113–138.

Nikita 2021: E. Nikita, An introduction to the study of burned human skeletal remains. The Cyprus Institute Science and Technology in Archaeology and Culture Research Center (STARC), Guide 4 (ver. 1.0) (Nicosia 2021).

Nowak et al. 2022: K. Nowak/Z. Stos-Gale/T. Stolarczyk/B. Miazga, The Late Bronze Age 'metallurgists' graves' in south-western Poland. Tracing the provenance of the metal raw material using casting moulds. Journal of Archaeological Science – Reports 42, 2022, 103393. https://doi.org/10.1016/j.jasrep.2022.103393.

Orlicka-Jasnoch 2019: J. Orlicka-Jasnoch, Skarb ludności kultury łużyckiej z Nowego Kramska. Aspekt archeologiczny. In: A. Michalak/J. Orlicka-Jasnoch (eds.), Skarb z Nowego Kramska. Analizy. Konteksty (Zielona Góra 2019) 17–138.

Ostasz et al. 2011: A. Ostasz/P. Owczarek/M. Wąs, Sprawozdanie z badań ratowniczych na stanowisku wielokulturowym w Rębielczu, stanowisko 16, AZP 16-44/104, gm. Pszczółki, woj. pomorskie. In: S. Kadrow (ed.), Raport 2005–2006 (Warszawa 2011) 11–32.

Ostoja-Zagórski 1989: J. Ostoja-Zagórski, Anthropogenic changes of the natural environment in the Late Bronze Age in the south-east Baltic Sea zone. In: B. Ambrosiani (ed.), Die Bronzezeit im Ostseegebiet. Ein Rapport der Kgl. Schwedischen Akademie der Literatur, Geschichte und Altertumsforschung über das Julita-Symposium 1986. Konferenser 22 (Stockholm 1989) 27–34.

Osypińska 2015: M. Osypińska, Szczątki zwierzęce z kurhanu VII na cmentarzysku kurhanowym Dolice 40/Animal remains from Barrow VII in the barrow cemetery at Dolice 40. In: M. Kaczmarek, Dolice. Cmentarzyska kurhanowe z późnej epoki brązu na Pomorzu Zachodnim / Dolice. Barrow cemeteries from the Late Bronze Age in Western Pomerania. Hyperborea. Poznańskie studia nad epoką brązu i wczesną epoką żelaza 1 (Poznań) 247–252.

Podgórski 1992: J. T. Podgórski, Fazy cmentarzysk kultury łużyckiej i pomorskiej na Pomorzu Wschodnim. In: S. Czopek (ed.), Ziemie polskie we wczesnej epoce żelaza i ich powiązania z innymi terenami (Rzeszów 1992) 199–214.

Przybyła 2009: M. S. Przybyła, Intercultural Contacts in the Western Carpathian Area at the Turn of the 2nd and 1st Millennia BC (Warszawa 2009).

Przybyła 2013: M. S. Przybyła, Mating systems in prehistoric populations. An evolutionary approach and archaeological evidence. Praehistorische Zeitschrift 88, 2013, 208–225.

Przybyła 2014: M. S. Przybyła, Teoria ewolucji w archeologicznych badaniach nad dawnymi społeczeństwami. Prace Archeologiczne 67 (Kraków 2014).

Przybyła 2017: M. S. Przybyła, The formation and breakdown of the Carpathian social networks – a discussion on the archaeological record from the Bronze Age Upper Vistula river. In: U. Bugaj (ed.), The Past Societies. Polish lands from the first evidence of human presence to the early Middle Ages 3: 2000-500 BC (Warszawa 2017) 187–262.

https://doi.org/10.2369/9783869354439.beyond-urnfields

Rasmussen M. 2018: M. Rasmussen, Landskaborganisation i Sydvestjylland. Mobilitet og kontrol. In: S. Boddum/N. Terkildsen (eds.), Status og samfundsstruktur i yngre bronzealders kulturlandskab. Yngre bronzealders kulturlandskab 6 (Viborg, Holstebro 2018) 37–47.
Rebay-Salisbury 2016: K. Rebay-Salisbury, The human body in Early Iron Age Central Europe. Burial practices and images of the Hallstatt world (London, New York 2016).
Rożnowski 1968: F. Rożnowski, Analiza antropologiczna ludzkich szczątków z grobów ciałopalnych z cmentarzyska w Grabowie, pow. Bytów, stanowisko 1. Materiały Zachodniopomorskie 14, 1968, 127–140.
Rząska/Walenta 2017: H. Rząska/K. Walenta (eds.), Brązy ukryte w ziemi… Łużycki skarb z Charzyków (Chojnice 2017).

Sabatini 2007: S. Sabatini, House Urns. A European Late Bronze Age Trans-cultural Phenomenon. Gotarc Series B. Gothenburg Archaeological Theses 47 (Göteborg 2007).
Skrzypek 1975: I. Skrzypek, Cmentarzysko ciałopalne ludności kultury łużyckiej w miejscowości Dzierżęcino, koło Koszalina, stanowisko 3. Koszalińskie Zeszyty Muzealne 5, 1975, 3–17.
Sprockhoff 1931: E. Sprockhoff, Jungbronzezeitliche Formenkreise an der unteren Oder und unteren Weichsel. Blätter für deutsche Vorgeschichte 8, 1931, 4–32.
Sprockhoff 1956: E. Sprockhoff, Jungbronzezeitliche Hortfunde der Südzone des Nordischen Kreises (Periode V). Römisch-Germanisches Zentralmuseum zu Mainz, Katalog 16 (Mainz 1956).
Sprockhoff/Höckmann 1979: E. Sprockhoff/O. Höckmann, Die gegossenen Bronzebecken der jüngeren nordischen Bronzezeit. Kataloge vor- und frühgeschichtlicher Altertümer 19 (Mainz 1979).
Strobin/Molęda 2013: A. Strobin/N. Molęda, Piece do wypału ceramiki z wczesnej epoki żelaza odkryte w miejscowości Brzyno, pow. pucki, Gdańskie Studia Archeologiczne 3, 2013, 211–242.
Szczurek/Kaczmarek 2022: G. Szczurek/M. Kaczmarek, Kaliska II. Skarb przedmiotów metalowych z późnej epoki brązu na Pomorzu/The Late Bronze Age Metal Hoard from Pomerania. Kaliska II. Hyperborea. Poznańskie studia nad epoką brązu i wczesną epoką żelaza 1 (Poznań 2022).
Szymańska 1977: A. Szymańska, Cmentarzysko kurhanowe kultury łużyckiej z IV–V okresu epoki brązu w Siemirowicach, gm. Cewice (badania w latach 1971–1974). Pomorania Antiqua 7, 1977, 247–341.
Ślusarska 2017: K. Ślusarska, Faces from the past: Face urns of the Pomeranian Culture and an idea of humans in the early Iron Age. In: H. Schwarzberg/V. Becker (eds.), Bodies of Clay: On Prehistoric Humanized Pottery (Oxford 2017) 213–230.
Ślusarska 2020: K. Ślusarska, W poszukiwaniu reguł w obrządku pogrzebowym kultury pomorskiej. Gdańskie Studia Archeologiczne 8, 2020, 184–203.
Ślusarska 2022: K. Ślusarska, The Late Bronze Age to Early Iron Age transition in the lower Oder and the Oder lagoon region from settlement and environmental perspectives. In: D. Hofmann/F. Nikulka/R. Schumann (eds.), The Baltic in the Bronze Age. Regional Patterns, Interactions and Boundaries (Leiden 2022) 289–308.

Tackenberg 1971: K. Tackenberg, Die jüngere Bronzezeit in Nordwestdeutschland. Teil I. Die Bronzen. Veröffentlichungen der urgeschichtlichen Sammlungen des Landesmuseums zu Hannover 19 (Hildesheim 1971).
Tecco Hvala 2012: S. Tecco Hvala, Magdalenska gora. Družbena struktura in grobni rituali železnodobne skupnosti / Magdalenska gora. Social structure and burial rites of the Iron Age community. Opera Instituti Archaeologici Sloveniae 26 (Ljubljana 2012).
Thrane 1990: H. Thrane, Pomerania and South Scandinavia during the Late Bronze Age, some provisional remarks. In: T. Malinowski (ed.), Problemy kultury łużyckiej na Pomorzu (Słupsk 1990) 99–108.

Uciechowska-Gawron 2007: A. Uciechowska-Gawron, Analiza porównawcza ceramiki łużyckiej ze stanowisk osadniczych w rejonie Dolnej Odry. In: M. Fudziński/H. Paner (eds.), Aktualne problemy kultury łużyckiej na Pomorzu (Gdańsk 2007) 139-143.
Urban 2019: J. Urban, Gospodarka rolna społeczności tzw. kultury łużyckiej (Warszawa 2019).

Wiącek 1979: B. Wiącek, Z zagadnień produkcyjnych we wczesnej epoce żelaza na Pomorzu Wschodnim. In: T. Malinowski (ed.), Problemy kultury pomorskiej (Koszalin 1979) 209–218.
Włodarczak 2011: P. Włodarczak, Późnoneolityczne i wczesnobrązowe kurhany w Europie środkowej, południowej i wschodniej – wprowadzenie. In: H. Kowalewska-Marszałek/P. Włodarczak (eds.), Kurhany i obrządek pogrzebowy w IV–II tysiącleciu p.n.e. (Kraków, Warszawa) 29–36.

Żurawski 2014: Z. Żurawski, Żarnowiec – problem konserwatorski. In: M. Fudziński/H. Paner (eds.), Z dziejów badań archeologicznych na Pomorzu Wschodnim (Gdańsk 2014) 395–398.

Karol Dzięgielewski
Jagiellonian University
Institute of Archaeology
Kraków
Poland
karol.dziegielewski@uj.edu.pl

https://doi.org/10.2369/9783869354439.beyond-urnfields

https://doi.org/10.2369/9783869354439.beyond-urnfields

A tale of people, places and broken pots. A long-term perspective on the emergence of urnfields in the Lower-Rhine-Basin

Arjan Louwen

Keywords: Late Bronze Age-Early Iron Age, urnfields, funerary practices, ancestors, land/landscape, cremation

Abstract: Present day Netherlands is located in a geographical area referred to as the Lower-Rhine-Basin. Especially the sandy soils in the southern and eastern regions of the country are rich in archaeological sites that have yielded cremation graves dating to the Late Bronze Age (1100–800 BCE) and Early Iron Age (800–500 BCE). In these regions too, cremation graves from said periods are traditionally seen as belonging to the so-called 'urnfield phenomenon'. Though there is no denying that the Lower-Rhine-Basin was indeed part of extensive trading networks along which both goods and ideas were exchanged across the European continent, it will be argued in this chapter that many of the hallmarks considered typical for urnfield graves already had their roots in the Middle Bronze Age landscape of the Lower-Rhine-Basin. The funerary practices concerned involved the cremation of the dead, the deliberate fragmentation of objects associated with the dead and the interment of cremated remains in or underneath burial mounds in locations connected to the ancestors. The chapter will make suggestions for future research, arguing that a better understanding of why the urnfields emerged can be obtained when we focus on the intricate interplay between people, objects and places in Bronze Age local communities.

Introduction

The Lower-Rhine-Basin (LRB) is one of many areas in northwest Europe where cemeteries known as urnfields are abundant. The region sits on the westernmost edge of the Northwest European Plain and is characterised by an only slightly undulating landscape. At the time of the urnfields, this landscape consisted of a patchwork of ice-pushed ridges and cover-sand ridges cut by countless (dry) valleys, rivers, streams and marshes. The western part of the region mostly consisted of uninhabitable marshland while along the coast some indications for human occupation are known. At present, the entirety of the Netherlands, Belgium north of the Ardennes and westernmost Germany fall within the confines of the LRB (Fig. 1). This chapter will mainly focus on the Dutch material.

https://doi.org/10.2369/9783869354439.beyond-urnfields

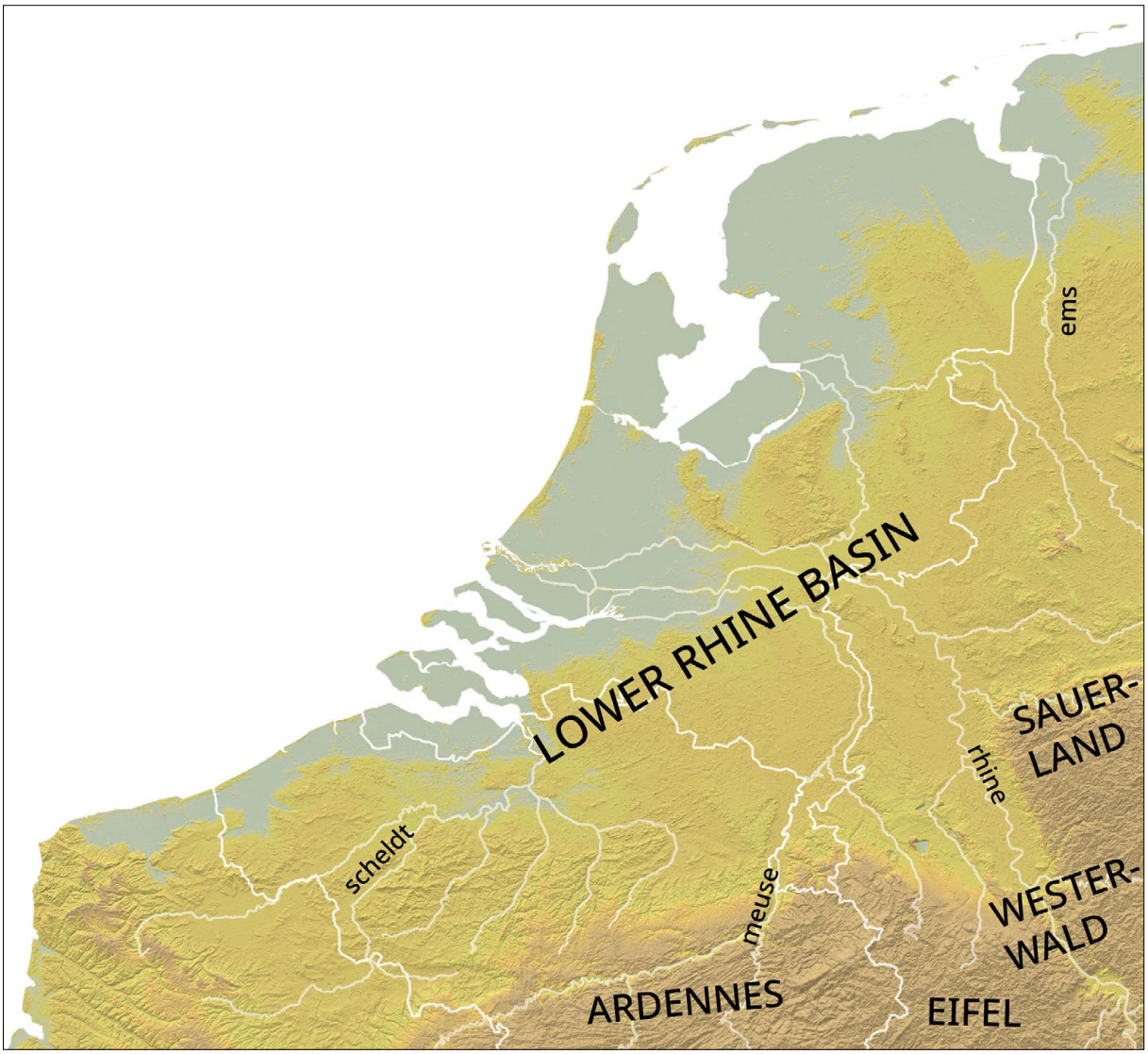


Fig. 1. The geographical are of the Lower-Rhine-Basin. Map adapted after Roymans *1991 (fig. 1) and originally published in* Louwen *2021 (fig. 1.2).*

Throughout the Netherlands some 700 locations are known[1] to have yielded graves dating to the Late Bronze Age (1100–800 BCE) and the Early Iron Age (800–500 BCE). About 99 % of the graves from this period involve cremation graves (Louwen 2021, 85), hence this chapter in later prehistory is also referred to as the 'urnfield period' (Gerritsen 2003, 15) and the graves dating to said period as 'urnfield graves'. The 1 % of inhumation graves is largely formed by a group of Early Iron Age graves that cluster in the Dutch riverine area (Van den Broeke 2014) but that in most occasions still form part of cemeteries where cremation was the norm. Urnfields in the Netherlands often consist of large collections of small funerary monuments, mostly round mounds, that cover one, sometimes more cremation graves (Fig. 2). For this chapter it is important to note that a distinction is made between the actual *grave* which is the burial pit containing the cremated remains and the *monument* covering a grave – because a single monument can contain multiple graves. When the graves themselves are con-

1 See Louwen 2021, Appendix 1 for an extensive overview of these sites.

https://doi.org/10.2369/9783869354439.beyond-urnfields

Fig. 2. Impression of urnfield funerary monuments and urnfield graves in the Lower-Rhine-Basin. All pictures were taken at the excavation of Oosterhout-De Contreie, courtesy of ADC-Archeoprojecten Bv. Amersfoort. Top left: Cremation grave without container, cremated remains covered by pyre debris; middle: Urn grave in burial pit filled with pyre debris; right: Cremation grave without container, pyre debris and cremated remains mixed. Bottom: Surrounding features (circular ditches) of the original small burial mounds. On many occasions only the ditches have been preserved while the mounds themselves have been levelled (after Louwen *2021, fig. 1.3, photos after* Roessingh *et al. 2012, figs. 5.14, 5.23–24).*

cerned, a great variety in grave types exists for the LRB (De Mulder 2011, fig. 8.4; Louwen 2021, fig. 3.10) but they all boil down to the deposition of cremated remains in mostly small burial pits, whether or not collected in an urn before burial (Fig. 2). Grave goods are scarce, and when they do occur, they mostly concern pieces of accessory pottery or (pieces of) metal objects related to personal adornment such as bracelets, neck rings, dress pins, razors and tweezers (Louwen 2021, tab. 5.4).

As most of the here described features do not differ that much from urnfields in neighbouring regions, the cemeteries in the LRB too have been logically ascribed to the same cultural phenomenon. However, as the mindful reader might have noticed, the start of the urnfields in the LRB is set rather late when compared to central Europe (Harding 2001; Sørensen/Rebay-Salibury 2023). Though local traditions have certainly not been disregarded in the study of the roots of these cemeteries in the LRB (e.g. Fokkens 1997; Gerritsen 2003), the impression persists that urnfields originally are a central European phenomenon that gradually found its way to northwest Europe (Kimmig 1964; De Laet 1979). In this chapter it will be argued that many of the hallmarks considered to be typical for the urnfields were already present in the LRB long before 1100 BCE. And though clearly part of a Europe-wide phenomenon, the urnfields in the LRB seem to have been deeply rooted in local ideas about how the ancestors related to the land.

https://doi.org/10.2369/9783869354439.beyond-urnfields

Urnfield research in the Lower-Rhine-Basin

Long before they were called as such, *urnfields* in the LRB were already being excavated. As early as the beginning of the 18th century it had occurred to scholars that the strange small mounds that dotted the vast heathlands harboured pots filled with ash and burned bones that represented a specific funerary rite from a distant past (e.g. Nunningh 1713). When the great heath reclamations started in the mid-19th century, reports of hundreds of urns collected from specific fields have found their way to our archives (e.g. Hermans 1865; Ort 1882) but only rarely would a few of these urns eventually also find their way to a local mantelpiece or museum. It is only at the end of the 19th century, when archaeology started to establish itself as a scientific discipline, that urnfields in the LRB were investigated more systematically and the first documented excavations were carried out. In those days, the term *urnfield* had already been coined (Probst 1996, 258) and researchers were now fully aware of the cultural-chronological potential of these cemeteries. When studying the records, most urnfields in the Netherlands have in fact been investigated in the period between the start of the 20th century and the Second World War (Louwen 2021, fig. 3.15). Excavations were mostly carried out by the curators from the National Museum of Antiquities in Leiden and researchers from the newly founded Bioarchaeological Institute in Groningen. In most occasions, these were rescue excavations in the wake of heath reclamations and were carried out completely by hand. Their focus most logically rested with the monuments still visible at the surface and the associated graves. This all changed in the late 1950s and early 1960s with the introduction of the dragline mechanical excavator that allowed larger extents of ground to be opened up. In those days attention had gradually shifted to the so-called Medieval *essen* (English: plaggen soils). Essen consist of a mix of sods and manure added to agricultural fields to enrich the minerally poor sandy soils. Over time these had covered up large stretches of the original late prehistoric landscape and now slowly started to reveal one new urnfield after the other. Until the 1990s most of the excavations still concerned rescue projects, but this changed with the introduction of 'Malta-archaeology'. From then on, development-led excavations became the norm, as they still are today. As a result, urnfield graves also started to come to light in areas that previously received little attention such as the Dutch riverine area (e.g. Van den Broeke 2002a) and western coastal zone (Bulten/Opbroek 2014). Especially the fluvial clays of the Betuwe and Nijmegen regions provided new archaeological insights as almost all inhumation graves dating to the Early and Middle Iron Age have been found in this area and were only excavated after the 1990s. The perfect preservation conditions of the fluvial clays also started to yield 'new' find categories in graves such as unburned animal bones. A final contribution of the development-led excavations worth mentioning here is the vast extents of ground opened up by these projects providing us with new insights on the size and structure of these late prehistoric burial grounds. As will be argued later, such a scope is paramount in understanding the role urnfields fulfilled for the local communities that once used them to bury their dead.

Funerary practices in the Lower-Rhine-Basin at the time of the urnfields

Chronological challenges

For the LRB it is rather difficult to ascertain what 'at the time of the urnfields' exactly entails. Where in central Europe the Late Bronze Age is often regarded as synonymous with the 'urnfield period' (Harding 2001), in the LRB quite many cemeteries remain in use at least until the start of the Middle Iron Age in the 5th century BCE (Gerritsen 2003, 16). Recently, broader sampling strategies of cremation graves for radiocarbon dating even revealed that locations used for burial in the Early Iron

https://doi.org/10.2369/9783869354439.beyond-urnfields

Age sometimes continued to be in use as such until the Roman Period[2] (e.g. Blom/Van der Velde 2015). Though this is certainly not to say that no new cemeteries were founded in the Middle Iron Age (500–250 BCE) and Late Iron Age (250–12 BCE), nor that the funerary practices in said periods did not slightly alter. However, the continuous use of the urnfields in the subsequent periods begs the question whether drawing a strict border in time for the end of the urnfields is in fact justified. The same problem applies to the start of urnfields in the LRB. The main topic of this chapter in fact revolves around this very question. When can we speak of 'urnfields'? Or what makes an urnfield 'an urnfield'? We will return to these questions in more detail later, but for now we take the collections of long and (small) round mounds erected over cremation graves as the typical traits for urnfields in this corner of Europe. Though it has long since been recognised that urnfields did not just appear out of nothing around that time (Fokkens 1997; Gerritsen 2003, 15; Hessing/Kooi 2005, 631; 635–639), the start of the Late Bronze Age around 1100 BCE is generally also regarded as the beginning of the 'urnfield period' (Gerritsen 2003, 15; Hessingh/Kooi 2005, 631).

When zooming in on the LRB, slight chronological and cultural differences in the sequence of events are presumed to have existed between its northern and southern parts (Desittere 1968; Kooi 1979; Verlinde 1987; Hessing/Kooi 2005; Verlinde/Hulst 2010). While the north[3] of the LRB seems to have been oriented more towards the north German plains (*Emskultur*), the south[4] shows more affiliations with the Middle Rhineland (*Niederrheinische Grabhügelkultur*). In the north, the introduction of long mounds of the 'Vledder-type' and the occurrence of so-called *brandskeletgraven* (German: *Brandskelettgräber*; literally meaning 'burnt-skeleton graves') are seen as heralding the dawn of the urnfields (Hessingh/Kooi 2005, 635–637). Vledder long mounds involve elongated mounds surrounded by a ditch with a double row of opposing posts along the central axis of the monument. These latter features are interpreted as the remains of funerary houses (Hessingh/Kooi 2005, 636). *Brandskeletgraven* are a form of cremation graves that seem to mimic inhumation graves by spreading out the cremated remains in a pit of which the size is comparable to that of inhumations. Calibrated radiocarbon dates associated with these two phenomena significantly predate the start of the 11th century BCE (Hessingh/Kooi 2005, 636), which is the reason why the beginning of the urnfield period in the north of the LRB is placed slightly earlier, in the mid-12th century BCE. Since up to the 2000s these early radiocarbon dates lacked for the south of the region, here the mid-11th century BCE is often taken as the start (Hessingh/Kooi 2005, 639). However, as will appear later on, in the last twenty years earlier radiocarbon dates have become available as well for the south of the LRB.

Throughout the urnfield period slight differences in monument and urn types remain prevalent when the north of the LRB is compared to the south. *Vledder*-type long mounds and keyhole-shaped monuments (German: *Schlüssellochgräber*) do for example rarely[5] occur south of the river Meuse, while the so-called *Kerbschnitt* urns show a stronger affiliation with the southern part of the region. However, when the funerary practices themselves are concerned, urnfield graves in both the north and the south of the LRB bear striking resemblances, suggesting people inhabiting both areas seem to have adhered to the same principles. Therefore, in the following only when relevant will differences between the various corners of the LRB be indicated.

2 Roman Period in the Netherlands: 12 BCE–450 CE.

3 For the Low Countries these are approximately the Dutch provinces of Drenthe, Groningen and parts of Overijssel.

4 These include the larger parts of both Dutch and Belgian provinces of Brabant and Limburg. The southern part of the Lower-Rhine-Basin is also referred to as the 'Meuse-Demer-Scheldt region' (e.g. Theuws/Roymans 1999; Gerritsen 2003), while a smaller part of the same area, mostly confined to the Pleistocene sands and Holocene marshlands in between, goes by the name of the 'Kempen area'.

5 Though a bit different in appearance than the northern examples, a keyhole-shaped monument was excavated in the south of the LRB at Beegden (Roymans/Hoogland 1999, fig. 8). Also, one of the Middle Bronze Age monuments in the cemetery of Haps-Kampsveld strongly resembles a keyhole-shape (Verwers 1972, fig. 11).

https://doi.org/10.2369/9783869354439.beyond-urnfields

A final challenge we face when studying developments in funerary practices throughout the urnfield period involves the availability of radiocarbon dates and the restrictions the technique itself poses for this specific period. Starting with the latter challenge, the entire second half of our period of study (Early Iron Age) coincides with the infamous 'Hallstatt plateau', a flat section in the radiocarbon calibration curve *c.* 750–420 BCE (Wijma et al. 1996; Rose et al. 2022, 2). Though in recent years new techniques in the field of radiocarbon dating have become available that allow to calibrate more precise certain sections of the plateau (e.g. Rose et al. 2022, 3), radiocarbon dates available for the Dutch part of the LRB have yet to be submitted to a study taking into account these new possibilities.

The former challenge of the availability of radiocarbon dates is in fact twofold. On one hand the number of available dates is still rather small when put in relation to the overall number of graves that have been unearthed over the years. For the tens of thousands of graves known for the Netherlands alone, only some 400 radiocarbon dates are available (Louwen 2021, Appendix 2).[6] Approximately half of these radiocarbon dates have been sampled from cemeteries excavated since the 2000s (ibid.), while the vast majority of urnfields in the Netherlands has been excavated (long) before that time (Louwen 2021, fig. 3.15). On the other hand, a strong bias exists in the selection criteria employed to select the graves for radiocarbon dating as most of them were in fact aimed at refining the existing typo-chronologies. As a result of which, especially graves were selected that had strong typo-chronological markers such as specific urn types, grave goods and monument types (e.g. Lanting/Van der Plicht 2003/2004; 2005/2006). The problem being here that many urnfield graves in fact lack these typo-chronological markers and have in the past only rarely been radiocarbon dated. Instead graves that lack clear typo-chronological markers are often, be it unwittingly, 'lumped' with the ones that do. Consequently, many cemeteries published in the past fall within the timeframe of the Late Bronze Age-Early Iron Age. There is no denying here that urnfields in the LRB are indeed most prevalent in said period. Recent, more broader sampling strategies for radiocarbon dating however suggests that some cemeteries start way earlier than 1100 BCE (e.g. Bulten/Opbroek 2014; De Wit/Bergsma 2008; Dyselinck 2013; De Mulder et al. 2007) or continue way after 400 BCE (e.g. Tol 2000; 2009; Blom/Van der Velde 2015; Van der Leije 2018).

The chronological challenges presented in this section do not necessarily have to be regarded as a negative outcome. On the contrary, acknowledging these challenges opens up new angles for research when it comes to long term developments in funerary customs throughout the metal ages. For the urnfields in the LRB, these funerary customs will be further elaborated upon in the following section. The basis for this overview is formed by the recent PhD-research carried out by the author (Louwen 2021) for which 3,182 graves from 75 different Late Bronze Age-Early Iron Age sites from the Netherlands have been studied. The southernmost (Belgian) section of the LRB has quite recently been researched and published in the extensive work by Guy de Mulder (De Mulder 2011). Though the Dutch and Belgian data do not substantially differ, it is important to note that the numbers presented in the following are solely based on the research carried out for the Dutch section of the LRB (see Louwen 2021 for an extensive overview and discussion of the region).

So many people, so many ways?

Perhaps the most striking characteristic of urnfield graves in the LRB is the variation that can be observed in their compositions. There clearly was not a strict blueprint of what an urnfield grave had to look like (see Fig. 2). Not even the use of urns for containment of the cremated remains seems to have been a prerequisite as not even half the graves in the study area were actual *urn* graves.[7] For the

6 This inventory can be considered complete up to 2016 (year of publication).

7 Of the 3,137 cremation graves studied only 43 % proved to be actual urn graves (Louwen 2021, 107).

https://doi.org/10.2369/9783869354439.beyond-urnfields

majority of graves the cremated remains had either been contained in some form of (now deteriorated) organic container, were scattered directly into the burial pit or were buried mixed with pyre debris (see Louwen 2021, tab. 6.3). Occasionally, some regional and temporal trends can be observed. For example, cemeteries in the sandy area of east Brabant and north Limburg in the south of the Netherlands exhibit extremely high shares (>90 %) of urn graves for the beginning of the Early Iron Age (Gerritsen 2003, 128; Louwen 2021, 109), but barely two centuries later the use of urns seems to have been abandoned altogether (see Louwen 2021, table 5.1). Another time-related trend that can be observed for the LRB as a whole is that especially during the Early Iron Age the number of graves for which pyre debris had been included seems to increase (Louwen 2021, 165–166 fig. 6.6). Perhaps the cinerary barrows of the Middle Iron Age, a form of burial where the cremated remains are left on the pyre and subsequently covered by a small mound (Hessingh/Kooi 2005, 637; Lanting/Van der Plicht 2005/2006, 308), can be seen as the culmination of the archaeologically detectable growing importance of the funeral pyre.

As with most urnfields across the continent, in the LRB too, men, women and children are all represented. Overall, the share of children (<15 years; neonates included) among the deceased (Louwen 2021, fig. 6.2) seems in accordance with the expected child mortality rates in premodern societies (Gurven/Kaplan 2007, 326). Additionally, men, women and children appear to have been treated rather indiscriminately when sex and age estimations are held against several predominant practices in urnfields such as the use of urns, the provision of accessory pottery in the grave or central burial underneath urnfield mounds (Louwen 2021, figs. 5.2–3; tables 5.7; 6.6). Though children were clearly granted their share of autonomy when the overall funerary practices are concerned,[8] it is remarkable that some 80 % of the confirmed cases of multiple persons buried in one grave involve combinations of adults and children (Louwen 2021, 105). This observation could indicate that in these cases the social identities of children were still attached to their adult relatives. Also, personal items such as bracelets and neck rings are most often found in the graves of adults and are only rarely associated with children (Louwen 2021, table 5.7). An explanation for this observation could be that these (dress) items were deemed inseparable (or *inalienable*)[9] from their owners (cf. Weiner 1992; Godelier 1999) and were only earned or acquired at a certain stage in life.

Grave goods in urnfield graves are quite scarce in numbers, with only 13.5 % of the graves containing some form of artefact[10] (Louwen 2021, 121–122). It is important to emphasise that for acidic soils only the most resilient materials are preserved (e.g. stone, pottery, burnt bone and glass; metal to a lesser degree), whereas any unburnt organic grave goods will have deteriorated over time. The object categories that did survive are limited to accessory pottery (9 % of graves), items associated with personal appearance such as bracelets, neck- and earrings, pins and fibulae but also razors and tweezers (2–3 % of graves) and finally the small categories of tools and weapons (both categories in less than 1 % of the graves). Though throughout the LRB some stylistic and regional trends can be observed, it is at the same time evident that in the entire region the same categories of objects were selected to accompany the deceased in the grave.

Animal bones from predominantly (middle-)large mammals, such as cow, sheep and pig have only been observed in a small number of graves (n = 119). There is however a slight bias in this low share as in the Low Countries only from the 1990s onwards researchers really started to pay attention to the 'other' bones represented in urnfield graves. As most of the animal bones have been burned, it seems safe to assume that these animals accompanied the deceased on the pyre in the form of food

8 83.5 % of the non-adults in the present dataset were buried in a grave of their own (Louwen 2021, 160).

9 See Brück 2019; Brück/Fontijn 2013; Fontijn 2019 for more elaborate discussions on the archaeological applicability of the concept of (in)alienability in explaining how humans and objects could be linked to one another.

10 Urns were excluded from this count.

https://doi.org/10.2369/9783869354439.beyond-urnfields

offerings.[11] Occasionally the (burned) bones of dogs also turn up in urnfield graves. The fact that one dog even got its own grave and was provided with a bronze bracelet and bronze needle, points at the special status these creatures must have held.[12]

Perhaps poor in numbers, these objects do hint at a metaphorical 'richness' in the funerary practices themselves (also see Arnoldussen/De Vries, this volume) as they could go through various forms of manipulation before finally being interred with the cremated remains. Burning is the most occurring type of manipulation, most logically explained by the possibility that these objects accompanied the deceased on the pyre. The 'destruction' of these objects was however not limited to just burning as deliberate folding, bending and fragmentation have also been observed (Louwen 2021, 143–148; table 5.8). These latter forms of manipulation are perhaps most strikingly displayed in a small group of graves from the Early Iron Age designated as 'Hallstatt-C elite graves' with the bending of swords and the dismemberment of horse tack and wagons (Van der Vaart-Verschoof 2017). But when observed more closely, many 'regular' urnfield graves also show a form of deliberate fragmentation when the graves that contain loose pottery sherds are added to the count (Louwen 2021, 150–152). Though a portion of these sherds is probably still derivative of urns or accessory pottery heavily damaged by various taphonomic processes, there are also clear examples of pottery sherds deliberately added in such a capacity to the contents of the grave (e.g. Hissel et al. 2007, 184). The deliberate breaking of pottery vessels in funerals can be explained in many ways involving metaphors for the broken state of the body of the deceased or the ending of a life. As mentioned though, the deliberate fragmentation of objects was not just limited to pottery as many pieces of jewellery (e.g. bracelets and beads) have been found in fragmented state as well. More importantly, there are some clear examples where only parts of these items have been deposited in the grave and other parts of the same object were deliberately kept out (e.g. Dyselinck 2013, 86–88). When this observation is added to the loose pottery sherds found in these graves, an explanation could be that by intentionally breaking pots and pieces of personal items and keeping out of the grave parts of these same items, automatically links were created with people and/or places *outside* the grave. To explore what kind of links these might have concerned, in the following will be focussed on how individual graves could have related to other graves, and on an even broader scale, the surrounding land(scape).

Ancestral landscapes

In the previous section it has already been mentioned that multiple individuals could be buried in the same grave.[13] Combinations of two individuals are most prevalent but mixtures of three individuals also occurred (Louwen 2021, table 4.7). The Early Iron Age cemetery of Beegden even hosted two urns containing the cremated remains of four and seven individuals, respectively (Roymans/Hoogland 1999, 77). These observations suggest that the practice of cremation was not just seen as a metaphorical transformation of the corpse but could as much have been an objective in itself as cremating the dead eliminates the need to quickly dispose of the decaying corpse and turns the deceased into a tangible, durable *and* storable heap of calcined bones. In this light, the affirmed cases where the cremated remains of multiple individuals had been mixed suggest that these were used to negotiate and emphasise relations between decedents in the context of the grave. One could hold against this hypothesis that individuals might have been cremated together on the same pyre but then still a relation between individuals seems evident.

Also, there is another good reason to presume that cremated remains were used as vehicles in representing individuals in different places at the same time. When measured in weight, the cremated

11 Legs and ribs are most often represented, some of them showing cut marks (Louwen 2021, 148–149).

12 This grave was found at the Late Bronze Age cemetery of Broger-Drouwenerstraat (Lanting et al. 2001).

13 For the present dataset 51 affirmed cases of mixed graves have been attested (Louwen 2021, table 4.7).

https://doi.org/10.2369/9783869354439.beyond-urnfields

remains in urnfield graves seldomly weigh up to the expected quantity of cremated remains left after cremation (McKinley 1993, 285), even when the lower boundaries of the weight classes for adult individuals are taken as a reference (ibid.). Taphonomic processes, including our own excavation methods, play an important part in the lower total weights of cremated remains retrieved from prehistoric cremation graves (Lynnerup/Harvig 2013). However, even cremated remains from complete urns with intact lids fall several hundreds of grams short of the expected weight classes for adult individuals (Louwen 2021, table 4.4). Additionally, there are also several clear cases of token deposits as attested for a Late Bronze Age urn grave from Nijmegen-Kops Plateau where only one single piece of bone was retrieved from a well-preserved urn grave (Fontijn/Cuijpers 1999, 52). Overall, the here presented evidence suggests that not always all cremated remains left after cremation would finally enter the ground, at least not in one single location.

Returning to the cemetery of Beegden, the two urns containing the partial remains of respectively four and seven individuals were retrieved from underneath a long mound that probably represents the oldest monument in this relatively small urnfield (Roymans/Hoogland 1999, 82). The anthropological compositions of the two graves that include adults of both sexes and several children[14] possibly hints at a family (or families) brought in from elsewhere to establish a new (ancestral) burial ground, possibly leaving parts of these same individuals at their place of origin (Roymans/Hoogland 1999, 82; Louwen 2021, 212). The Beegden example suggests that cremated remains could indeed be wielded to emphasise relations between the dead. As argued, this would not only have involved the mixing of individuals but as much taking individuals apart,[15] allowing decedents to be represented at multiple locations at the same time.

Another emphasis of the relations between the dead in the urnfields is the practice of placing multiple graves in association with a single monument.[16] A notion that should be kept in mind here is that every time a new grave was added to a specific monument or cluster of graves, it was at the same time also decided *not* to bury the deceased *anywhere else* within the same burial ground. In other words, when graves were being added to already existing monuments, this represents a very conscious and deliberate decision by the mourning community. Based on the available radiocarbon dates for multiple graves within single monuments, a rough distinction can be made between graves being added to monuments of persons that could have known each other in life and graves that were added to monuments already centuries old (Louwen 2021, 188). Both practices were commonplace at the time of the urnfields and seem to hint at different notions of ancestry (e.g. De Coppet 1985; Helms 1998).

There are two arguments for why it is plausible that ancestors indeed played an important part in the daily lives of Late Bronze Age-Early Iron Age people in the LRB. The first argument cannot stand on itself entirely as it concerns an absence of evidence: The absence being here the complete lack of any imagery or iconography of deities in the LRB for said period (also see Fontijn 2019, 115). In addition, there are no sites before the Middle Iron Age that might have functioned as a temple or cult-place (De Leeuwe 2023). Instead, any behaviour that could in some way be seen as ritualistic, is confined to the *urnfields* themselves in the form of burials and active care for the dead (Gerritsen 2003; Louwen 2021; Arnoldussen/De Vries, this volume), the *house* in the form of building offerings and abandonment rituals (Van den Broeke 2002b; De Vries 2016; 2021) and *natural places* in the form of depositions in streams, rivers and bogs (Fontijn 2002; 2019). Gerritsen already pointed at the role of urnfields as the locations of an ancestral cult (Gerritsen 2003, 190–192). Additionally,

14 Grave 7: 1. Adult (female); 2. Adult (sex unknown); 3. Non-adult (>15 years); 4. Non-adult. Grave 22: 1. Adult (male); 2. Adult (Female); 3. Adult (Female); 4. Adult (Female); 5. Non-adult; 6. Non-adult; 7. Non-adult (Roymans/Hoogland 1999, 77; Louwen 2021, table 4.7).

15 In fact, the opposite of what our word '*in*dividual' literally means: un-dividable.

16 Cases: n = 135 (Louwen 2021, 187).

https://doi.org/10.2369/9783869354439.beyond-urnfields

the contemporary ritual focus on the house might also be connected to ancestral worship or reverence as the *house* itself could have functioned as a metaphor for the *House* (capital 'H') as in *lineage.* Helms makes a case that in extant horticulturalist communities the perception of the House is often closely associated with so-called *emergent ancestors* who literally emerge out of a House(hold) and who extend the lineage beyond the temporal (Helms 1998, 137–138). The offerings carried out in and around the house, as observed for Late Bronze Age-Early Iron Age farmsteads across the LRB (Van den Broeke 2002b; Gerritsen 2003; De Vries 2016; 2021), could therefore possibly be explained as a way of appeasing the (emergent) ancestral spirits affiliated with the house (or House for that matter). Before we continue, it should be mentioned here that a belief in either ancestors or deities is certainly not mutually exclusive and that the two often go hand in hand. However, the archaeological evidence available for the LRB points to ancestral reverence[17] rather than notions of functional gods modelled on the younger Classical, Germanic and Viking pantheons (Fontijn 2019, 115).

The second argument for why ancestors seem to have played an important role at the time of the urnfields concerns the nature of urnfield graves themselves. When broken down to their very essence, urnfield graves involve 1) the burial of cremated remains in locations where they are 2) surrounded by other burials of cremated remains (= the urnfield). An observation worth contemplating here is the simple fact that cremated remains needed to be buried. Clearly there are different ways of disposing of cremated remains after cremation such as leaving them on the pyre, scatter them on the surface or in water. Yet time and time again it was decided to anchor these last physical remains of decedents in locations where they would be surrounded by the other dead and where their presence was marked with a small monument. Though seemingly insignificant in size, taken together these vast collections of small mounds that make up an urnfield would eventually still effectuate a monumental presence of the dead in the landscape. Zooming out, the urnfields in the LRB are never enclosed by a ditch, fence or other type of physical barrier. In contrast, they have rather open characters and often find themselves on the fringes of inhabitable areas such as cover-sand plateaus (Van Beek/Louwen 2012; 2013), along natural infrastructural arteries such as rivers, streams and dry valleys (ibid.) or cresting high ridges such as at Nijmegen (Louwen 2021, fig. 8.6). The presence of roads has been suggested for several urnfields as well (Kooi 1979, figs. 153–154) and has possibly even been attested in early excavations (Holwerda 1914, fig. 5). Finally, recent large scale commercial excavations have revealed complete funerary landscapes (Hiddink/De Boer 2011; Blom/Van der Velde 2015) that could extend for more than two kilometres (Louwen 2021, 227–228). All this indicates that the dead were not only meant to be seen but had to be accessible rather than set apart, suggesting they were still very much part of daily life and attributed significant social roles. Their social roles not only stem from their omnipresence in the Late Bronze Age-Early Iron Age landscape, but as much from indications that the dead still needed to be cared for as is suggested by the small pottery cups and bowls associated with food and drink offerings that have regularly been retrieved from the circular ditches surrounding the graves or were found buried in between graves (see Arnoldussen/De Vries, this volume). Summing up, the *burial* of cremated remains, the prominent and/or accessible locations of urnfields and the active care for the dead all suggest that the dead in Late Bronze Age-Eary Iron Age communities in the LRB were seen as ancestors, comparable with notions about ancestry in extant horticulturalist communities (e.g. De Coppet 1985; Helms 1998). Though the anachronism is evident here, so must have been the overwhelming presence of the dead in the Late Bronze Age-Early Iron Age landscape of the LRB.

17 The neutral and more passive term 'reverence' is preferred over the more loaded term 'worship' that is more difficult to prove archaeologically.

https://doi.org/10.2369/9783869354439.beyond-urnfields

If in the LRB the ancestors indeed played an important part in urnfield funerary practices, where did these notions then come from? As argued in the above, ancestral reverence often goes hand in hand with a deep connection people experience with the land they live in (De Coppet 1985; Helms 1998; Theuws/Roymans 1999). This presupposes that such notions already had to be firmly in place before the first urnfields emerged and that the urnfields are somehow connected to older physical elements in the landscape related to these notions. Therefore, if we want to find out what triggered the emergence of urnfields in the region it is worth circling back to the question posed earlier in this chapter: What makes an urnfield 'an urnfield'?

The answer in fact depends on the region for which the question is asked. Where for the LRB 'collections of long and small round mounds erected over cremation graves (both with and without urns) dating between 1100 and 500 BCE' would be an apt description (e.g. Gerritsen 2003; Hessingh/Kooi 2005), for cemeteries in central Europe 'collections of urn graves in flat grave cemeteries dating between 1300 and 700 BCE' would however better catch the essence for said region (e.g. Harding 2000; 2001; Sørensen/Rebay-Salibury 2023). Despite these differences, what these cemeteries all seem to have in common is that they concern 1) collections of cremation graves in 2) a fixed point in the landscape (Harding 2000, 112–113; Darvill 2002, 448; Gerritsen 2003, 124; Hessing/Kooi 2005, 631). The 'Concise Oxford Dictionary of Archaeology' adds another notable observation to the definition stating that urnfields are '[…] in many cases constructed on or around an earlier round barrow […]' (Darvill 2002, 448). Apparently, the trait of connecting the dead to older funerary monuments is something observed for urnfields across the continent (also see Schumann, this volume) and forms a good point of departure for exploring how urnfield funerary practices in the LRB relate to what came before.

The earliest round barrows in the LRB can be found in the northern part of the region and date to the Corded Ware cultures in the early 3rd millennium BCE (Bourgeois 2013). The arrival of Corded Ware groups in the LRB initiated funerary traditions involving the construction or the reuse of burial mounds that would come to last for the next three millennia. Consequently, at the time of the urnfields the landscape was already dotted with monuments that would have been recognised as (ancestral) elements of people that inhabited the land (long) before.

It is however not Late Bronze Age urnfields that start incorporating and re-using older funerary monuments for the first time as the preceding Middle Bronze Age is in fact characterised by intensified mound construction, mound restoration and re-use (Bourgeois 2013, 165–167). Clearly, in this period there seems to have been a growing, if not overwhelming concern with the dead from both the near and the distant past. It is as if people wanted to make sure the dead maintained a physical presence in the Middle Bronze Age landscape. Middle Bronze Age mounds can therefore be found both in close connection to and even on top of Late Neolithic mounds, as well as in dispersed groups (Bourgeois 2013, 176).

It is against this background that the gradual transition from inhumation to cremation unfolds as cremation graves start to make up larger, if not dominant portions of the total number of graves in the Middle Bronze Age mounds (e.g. Van Giffen 1937; Theunissen 2009; Louwen et al. 2019a; b). In the Netherlands there are multiple examples of mounds dating as early as the 17th and 16th century BCE that solely contain cremation graves (Bourgeois/Fontijn 2015; Louwen et al. 2019a; b). Though men, women and children are represented among the dead buried in these mounds, it has been argued in the past that they still only represented a small percentage (10–15 %) of the original population (Theunissen 2009, 105; Gerritsen 2003, 121, 236). Recent physical anthropological studies of cremated remains from both old (Bourgeois/Fontijn 2015) and new (Smits 2019) excavations however suggest that this hypothesis no longer holds (Lohof 1994, 112). Instead a more

https://doi.org/10.2369/9783869354439.beyond-urnfields

inclusive funerary rite needs to be considered, perhaps comparable to that associated with the urnfields (see Louwen 2021, 204–208 for a more elaborate discussion). In this sense, Middle Bronze Age mounds that contain dozens of cremation graves can already be regarded as cemeteries in their own right (Louwen/Fontijn 2019).

Zooming in on the funerary practices associated with these Middle Bronze Age cremation graves, we can already see some traits not uncommon for the later urnfield graves as well. These practices include the urning of cremated remains (Theunissen 2009, 81–82; Bourgeois 2013, 36; fig. 3.7), the mixing of cremated remains of multiple individuals in one deposit (Theunissen 2009, 98; Smits 2019, 180) and adding accessory pottery and/or (personal) dress items to the contents of the grave (Theunissen 2009, 87). Even the inclusion of loose pottery sherds has been attested multiple times for Middle Bronze Age cremation graves (Theunissen 2009, 87; Gerritsen 2003, 121; Louwen et al. 2019b, 141).

Summing up, Middle Bronze Age burial mounds already exhibit several traits that later came to be characteristic of the urnfields. Not only do some of the burial mounds concern 1) collections of cremation graves in 2) a fixed point in the landscape, but on a more detailed level we can even detect parallels in the compositions of the graves themselves. Despite these similarities, Middle Bronze Age barrows and Late Bronze Age urnfields are still often studied as two distinct funerary traditions. The most important reason for this persistent division probably lies with the decline in mound construction that is presumed for the period between 1400 and 1100 BCE (Bourgeois 2013, 38), creating a chronological gap between the two respective periods. However, it will be argued in the following that what we are probably dealing here with is a bias of our own making.

To start with our chronologies themselves, these are traditionally (and still mostly) based on archaeologically *distinctive* traits. Therefore, Middle Bronze Age barrows and Late Bronze Age urnfields have also typically been studied separately *and* with a focus on what traits might separate them. However, if the focus is instead shifted towards the *connecting* traits, we might be dealing with a completely different picture in the LRB altogether. Firstly, there is a close spatial connection between many urnfields and older funerary monuments (e.g. Kooi 1979, fig. 152; Van Beek/Louwen 2012; 2013), Middle Bronze Age mounds in particular. Urnfield graves are also regularly dug into the top of these older mounds (Fokkens et al. 2009). Even the most exceptional urnfield grave unearthed in the Netherlands, the so-called 'Chieftain's grave of Oss' (Jansen/Fokkens 2007) was dug into a Middle Bronze Age barrow. Though in this latter example the respective graves dated centuries apart, there are also examples where urnfields seem to gradually grow out of Middle Bronze Age burial mounds such as at Gasteren (Van Giffen 1945; Louwen 2021, 191–194) and Boxmeer-Sterckwijk (Blom/Van der Velde 2015). Additionally, in spite of a presumed decline in mound construction in the period between 1400 and 1100 BCE (Bourgeois 2013, 38), cremation graves dating to this period are certainly not absent (Fig. 3).[18] These graves not only find themselves in cemeteries already reminiscent of urnfields such as at Den Haag (Hubertustunnel; Bulten/Opbroek 2014) and Maastricht (Ambyerveld; Dyselinck 2013), but also in 'classic' urnfields that developed around Middle Bronze Age mounds such as at Gasteren (Van Giffen 1945). In the example of Gasteren, the available radiocarbon dates even suggest a continuation in use of this particular burial location between the Middle Bronze Age and Late Bronze Age (Lanting/Van der Plicht 2003/2004, 213–214; Louwen 2021, Appendix 2). A more systematic approach to radiocarbon dating of cremation graves in both Middle Bronze Age mounds and urnfields is however necessary to further confirm a continuation of specific funerary practices. Especially urnfields that find themselves connected to Middle Bronze Age mounds are worth further investigation in this regard.

18 Guy de Mulder has observed comparable trends for the cemeteries located in Belgium (De Mulder 2011, 200).

https://doi.org/10.2369/9783869354439.beyond-urnfields

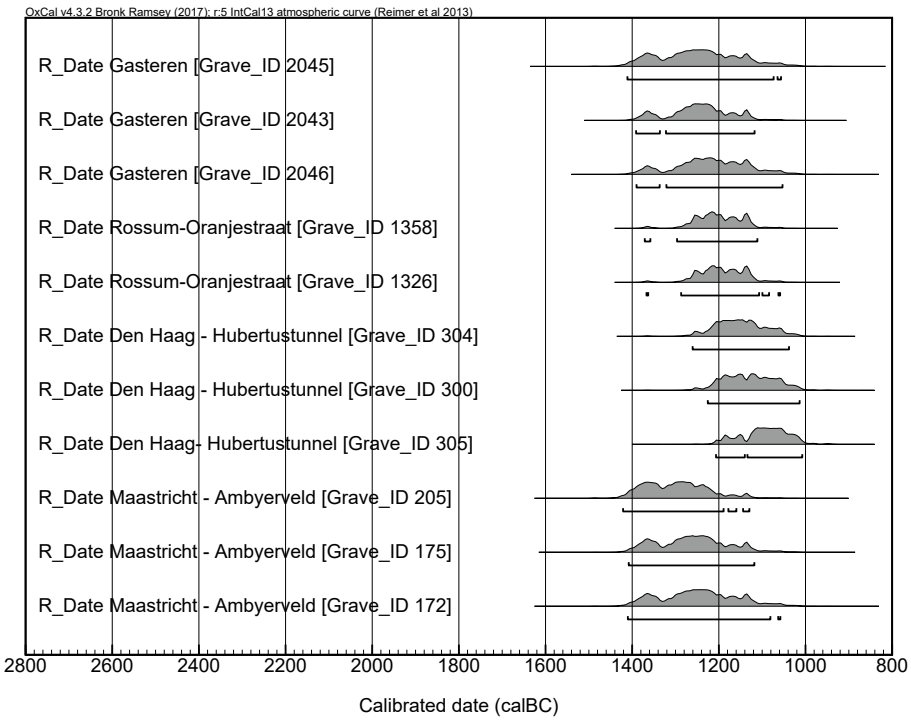


Fig. 3. Calibrated radiocarbon dates of graves excavated in urnfields covering the period of the presumed decline in mound construction (1400–1100 BCE).

Beyond urnfields

In conclusion, the observations discussed in this chapter force us to re-evaluate current ideas on how funerary practices developed throughout the Bronze Age and how these might tie into an ever-growing connection people experienced with the land they inhabited (Fontijn 1996). It was argued that the ancestors played an important part in this connection with the land and that the urnfields seem to build on elements in the landscape already in place for centuries. Not only do the urnfield graves carry strong resemblances to earlier cremation graves in Middle Bronze Age mounds, both urnfields and Middle Bronze Age barrows seem to adhere to the same desire to maintain the physical presence of the dead in the landscape by monumentalising cremation graves with (collections of) burial mounds. Additionally, in both periods the role of the dead was constantly being perpetuated and renegotiated with every addition of a new grave to an already existing mound or cluster of graves (also see Domscheit, this volume) in an urnfield. For the long term, the latter statement is even strengthened by the observation that many urnfields developed around Middle Bronze Age barrows. On a more detailed level, specific practices such as the intentional partial deposition of cremated remains or fragmented objects such as loose pottery sherds indicate people might have searched for means to extend the role of the dead beyond the grave. These latter practices have more accurately been documented for urnfield graves but as argued some of these also clearly have their roots in Middle Bronze Age cremation graves (Theunissen 2009, 87; Gerritsen 2003, 121; Louwen et al. 2019b, 141). Combined, the presented evidence suggests that the ancestors were attributed important, if not active roles in urnfield cosmology and that the origin of these notions must be sought in the Middle Bronze Age.

It should be emphasised here that the Middle Bronze Age in fact marks a period of rather diverse funerary practices that coexisted for longer periods of time (Drenth/Lohof 2005; Sørensen/

https://doi.org/10.2369/9783869354439.beyond-urnfields

Rebay-Salibury 2023) and that the transition from inhumation to cremation did not happen overnight. Instead, it probably took decades, if not centuries of constant (re)negotiation of local values in relation to new ideas concerning the dead body (cf. Sørensen/Rebay-Salibury 2023). Notwithstanding, when the LRB is concerned, it appears that many of the hallmarks we regard as typical for urnfield graves are firmly rooted in the funerary practices of the preceding Middle Bronze Age. We should therefore be more open to the possibility that the transition from inhumation to cremation happened far more simultaneously across the continent, in contrast to traditional models supposing a gradual spread of the cremation rite from central Europe to the fringes of the continent (e.g. Kimmig 1964; De Laet 1979). To gain a better understanding of how this transition unfolded in various regions of Europe and why in many regions this transition would finally result in the emergence of the urnfields, comparative regional studies on long term developments in funerary practices are necessary. Such regional studies should be backed up by more intensive and broader sampling strategies for the radiocarbon dating of cremation graves from both urnfields and Middle Bronze Age barrows and/or flat grave cemeteries (depending on the region) to refine our chronologies.

While the current chapter mostly focussed on the funerary practices, future research should adopt a more holistic approach (e.g. Fokkens 1997; Roymans/Kortlang 1999; Gerritsen 2003). Such an approach should include the latest insights concerning settlement data. For example, new dating evidence challenges current ideas about the use-life of late prehistoric farmhouses (e.g. Arnoldussen 2008, 92), which in turn challenges the current discourse on the wandering farmsteads (Schinkel 1994) in favour of more permanent settlement structures (Jansen 2021). The wandering farmstead model has been essential to current models of how barrows and urnfields relate to settlements and the social fabric of the late prehistoric landscape (Roymans/Fokkens 1991; Roymans/Kortlang 1999). In these models the ancestral burial grounds provide permanence to local communities as a counterbalance to the fleeting nature of their settlements (Roymans/Kortlang 1999, 40). With more lasting settlements this sense of permanence however extends to the living environment as well, potentially including the house as another ancestral locality in the late prehistoric landscape (cf. Helms 1998). Along the same line, ritualistic behaviour in the form of depositions in and around the house (Van den Broeke 2002b; De Vries 2016; 2021) has in the above already briefly been touched upon.

Finally, a holistic approach would only work if the relevance of natural places to these communities is acknowledged, as is testified for the Bronze Age (and Early Iron Age for that matter) by the countless depositions of metalwork (Fontijn 2002; 2019). One of the remarkable features of these depositions is that they are often selective, in the sense that specific object categories were deposited in specific parts of the landscape, such as bronze axes in springs and streams while swords were exclusively deposited in rivers (ibid.). Clearly, in the Bronze Age landscape of the Lower-Rhine-Basin (and beyond) *everything had its right place* (Fontijn 2008), including the cremated dead.

Bibliography

Arnoldussen 2008: S. Arnoldussen, A Living Landscape: Bronze Age settlement sites in the Dutch river area (c. 2000–800 BC) (Leiden 2008).

Blom/Van der Velde 2015: E. Blom/H. M. Van der Velde, De archeologie van Boxmeer-Sterckwijck: 4500 jaar wonen, werken en begraven langs de Maas. ADC-monografie 18 (Amersfoort 2015).

Bourgeois 2013: Q. P. J. Bourgeois, Monuments on the Horizon. The formation of the barrow landscape throughout the 3rd and 2nd millennium BC (Leiden 2013

Bourgeois/Fontijn 2015: Q. P. J. Bourgeois/D. R. Fontijn, The tempo of bronze age barrow use. Modelling the ebb and flow in monumental funerary landscapes. Radiocarbon 57(1), 2015, 47–64.

Brück 2019: J. Brück, Personifying Prehistory. Relational Ontologies in Bronze Age Britain and Ireland (Oxford 2019).

Brück/Fontijn 2013: J. Brück/D. R. Fontijn, The myth of the chief: Prestige goods, power and personhood in the European Bronze age. In: H. Fokkens/A. Harding (eds.), The Oxford Handbook of the European Bronze Age (Oxford 2013) 197–215.

https://doi.org/10.2369/9783869354439.beyond-urnfields

Bulten/Opbroek 2014: E. E. B. Bulten/M. Opbroek, Een crematiegrafveld in de duinen van Den Haag. In: E. M. Theunissen/S. Arnoldussen (eds.), Metaaltijden 1. Bijdragen in de studie van de metaaltijden (Leiden 2014).

Darvill 2002: T. Darvill, The Concise Oxford Dictionary of Archaeology (Oxford 2002).

De Coppet 1985: D. De Coppet, Land owns people. In: R. H. Barnes/D. de Coppet/R. J. Parkin (eds.), Contexts and Levels: Anthropological Essays on Hierarchy. Journal of Anthropological Society of Oxford occasional papers (Oxford 1985) 78–90.

De Laet 1979: S. J. De Laet, Prehistorische kulturen in het zuiden van de Lage Landen (Wetteren ^{2}1979).

De Leeuwe 2023: R. De Leeuwe, Before Temples. A study on the utilization of Iron Age rectangular structures and related depositional practices in the Low Countries (Leiden 2023).

De Mulder 2011: G. De Mulder, Funeraire rituelen in het Scheldebekken tijdens de late bronstijd en de vroege ijzertijd. De grafvelden in hun maatschappelijke en sociale context (Ghent 2011).

De Mulder et al. 2007: G. De Mulder/M. Van Strydonck/M. Boudin/W. Leclercq/N. Paridaens/E. Warmenbol, Re-evaluation of the Late Bronze Age and Early Iron Age chronology of the western Belgian urnfields based on ^{14}C dating of cremated bones. Radiocarbon 49(2), 2007, 499–514.

De Vries 2016: K. M. De Vries, Together apart. Iron age deposition practices on the Fries-Drents plateau. In: A. Müller/R. Jansen (eds.), Metaaltijden 3. Bijdragen in de studie van de metaaltijden (Leiden 2016) 93–104.

De Vries 2021: K. M. De Vries, Settling with the Norm? Norm and variation in social groups and their material manifestations in (Roman) Iron Age (800 BC – AD 300) settlement sites of the northern Netherlands (Leiden 2021).

De Wit/Bergsma 2008: M. J. M. De Wit/G. M. A. Bergsma, Begravingen uit de Late Bronstijd – Vroege IJzertijd en uit de Midden-IJzertijd in het urnenveld te Rossum. Een archeologische opgraving aan de Oranjestraat te Rossum, gemeente Dinkelland (Ov.). ARC-publicaties 187 (Groningen 2008).

Desittere 1968: M. Desittere, De urnenveldenkultuur in het gebied tussen Neder-Rijn en Noordzee (Brugge 1968).

Drenth/Lohof 2005: E. Drenth/E. Lohof, Mounds for the dead. Funerary and burial ritual in Beaker period, Early and Middle Bronze Age. In: L. P. Louwe Kooijmans/P. W. van den Broeke/H. Fokkens/A. L. van Gijn (eds.), The Prehistory of the Netherlands (Amsterdam 2005) 433–454.

Dyselinck 2013: T. Dyselinck, Maastricht Ambyerveld-Hagerhof. Een laat bronstijd urnenveld. BAAC-rapport A-08.0487 ('s Hertogenbosch 2013).

Fokkens 1997: H. Fokkens, The genesis of urnfields: economic crisis or ideological change? Antiquity 71, 1997, 360–373.

Fokkens et al. 2009: H. Fokkens/R. Jansen/I. Van Wijk, Het grafveld Oss-Zevenbergen, een prehistorisch grafveld ontleed. Archol-rapport 50 (Leiden 2009).

Fontijn 1996: D. R. Fontijn, Socializing landscape. Second thoughts about the cultural biography of urnfields. Archaeological Dialogues 3, 1996, 77–87.

Fontijn 2002: D. R. Fontijn, Sacrificial Landscapes. Cultural biographies of persons, objects and 'natural' places in the Bronze age of the Southern Netherlands, 2300–600 BC [PhD-thesis Leiden University]. Analecta Praehistoria Leidensia 33/34 (Leiden 2002).

Fontijn 2008: D. R. Fontijn, Everything in its right place? On selective deposition, landscape an the construction of identity in later prehistory. In: A. Jones (ed.), Prehistoric Europe (Malden 2008) 86–106.

Fontijn 2019: D. R. Fontijn, Economies of Destruction. How the systematic destruction of valuables created value in Bronze Age Europe, c. 2300 – 500 BC (London 2019).

Fontijn/Cuijpers 1999: D. R. Fontijn/A. G. F. M. Cuijpers, Prehistoric stone circles, stone platforms and a ritual enclosure from Nijmegen. Berichten van de Rijksdienst voor het Oudheidkundig Bodemonderzoek 43, 1999, 33–67.

Fontijn/Fokkens 2007: D. R. Fontijn/H. Fokkens, The emergence of Early Iron Age 'chieftains' graves' in the southern Netherlands: reconsidering transformations in burial and depositional practices. In: C. Haselgrove/R. Pope (eds.), The Earlier Iron Age in Britain and the Near Continent (Oxford 2007) 354–373.

Gerritsen 2003: F. Gerritsen, Local Identities. Landscape and Community in the Late Prehistoric Meuse-Demer-Scheldt Region. Amsterdam Archaeological Studies 9 (Amsterdam 2003).

Godelier 1999: M. Godelier, The Enigma of the Gift (Cambridge, Oxford 1999).

Gurven/Kaplan 2007: M. Gurven/H. Kaplan, Longevity Among Hunter-Gatherers: A Cross-Cultural Examination. Population and Development Review 33(2), 2007, 321–365.

Harding 2000: A. Harding, European Societies in the Bronze Age (Cambridge 2000).

Harding 2001: A. Harding, Reformation in Barbarian Europe, 1300–600 BC. In: B. Cunliffe (ed.), The Oxford Illustrated History of Prehistoric Europe (Oxford 2001) 304–335.

Harvig/Lynnerup 2013: L. Harvig/N. Lynnerup, On the volume of cremated remains – a comparative study of archaeologically recovered cremated bone volume as measured manually and assessed by Computed Tomography and by Stereology. Journal of Archaeological Science 40, 2013, 2713–2722. https://doi.org/10.1016/j.jas.2013.01.024.

Helms 1998: M. Helms, Access to Origins. Affines, Ancestors and Aristocrats (Austin 1998).

Hermans 1865: C. R. Hermans, Noordbrabant's oudheden ('s Hertogenbosch 1865).

Hessing/Kooi 2005: W. Hessing/P. B. Kooi, Urnfields and cinerary barrows. Funerary and burial ritual in the Late Bronze and Iron ages. In: L. P. Louwe Kooijmans/P. W. van den Broeke/H. Fokkens/A. L. van Gijn (eds.), The Prehistory of the Netherlands (Amsterdam 2005) 631–654.

Hiddink/De Boer 2011: H. A. Hiddink/E. De Boer, Opgravingen in Waterdael III te Someren 1. Zuidnederlandse Archeologische Rapporten 42 (Amsterdam 2011).

Hissel et al. 2007: M. Hissel/M. Parlevliet/J. Verspay, Begraven, bewonen, beakkeren: Archeologisch onderzoek bij de uitbreiding van de woonwijk Genoenhuis,

https://doi.org/10.2369/9783869354439.beyond-urnfields

gemeente Geldrop-Mierlo (Noord-Brabant). Amsterdam Archeologisch Centrum Publicaties 29 (Amsterdam 2007).
Holwerda 1914: J. H. Holwerda, Das Gräberfeld von 'De Hamert' bei Venlo (Leiden 1914).

Jansen 2021: R. Jansen, Verleden als leidraad. IJzertijdbewoning en landschapsinrichting in noord-oostelijk Noord-Brabant in Verleden én Heden (Leiden 2021).
Jansen/Fokkens 2007: R. Jansen/H. Fokkens, Het vorstengraf van Oss re-reconsidered. Archeologisch onderzoek Oss-Vorstengrafdonk 1997–2005. Archol-rapport 49 (Leiden 2007).

Kimmig 1964: W. Kimmig, Seevölkerbewegung und Urnenfelderkultur. In: R. von Uslar/K. J. Narr (eds.), Studien aus Alt-Europa 1 (Bonn 1964) 220–283.
Kooi 1979: P. B. Kooi, Pre-Roman urnfields in the north of the Netherlands (Groningen 1979).

Lanting/Van der Plicht 2003/2004: J. N. Lanting/J. Van der Plicht, De C14-chronologie van de Nederlandse pre- en protohistorie, IV: Bronstijd en Vroege IJzertijd. Palaeohistoria 45/46, 2003/2004, 117–262.
Lanting/Van der Plicht 2005/2006: J. N. Lanting/J. Van der Plicht, De C14-chronologie van de Nederlandse pre- en protohistorie, V: Midden- en Late IJzertijd. Palaeohistoria 47/48, 2005/2006, 241–427.
Lanting et al. 2001: J. N. Lanting/W. Prummel/A. G. F. M. Cuijpers, Eindelijk de hond in de pot gevonden. Paleoaktueel 12, 2001, 80–88.
Lohof 1994: E. Lohof, Tradition and change. Burial practices in the late Neolithic and Bronze Age in the northeastern Netherlands. Archaeological Dialogues 2, 1994, 98–118.
Louwen 2021: A. J. Louwen, Breaking and Making the Ancestors. Piecing together the urnfield mortuary process in the Lower-Rhine-Basin, ca. 1300–400 BC (Leiden 2021).
Louwen/Fontijn 2019: A. J. Louwen/D. R. Fontijn (eds.), Death Revisited. The excavation of three Bronze age barrows and surrounding landscape at Apeldoorn-Wieselseweg (Leiden 2019).
Louwen et al. 2019a: A. J. Louwen/D. R. Fontijn/C. M. van der Linde/M. Pruijsen/E. Smits/E. van Hees, Mound 2. In: A. J. Louwen/D. R. Fontijn (eds.), Death Eevisited. The excavation of three Bronze age barrows and surrounding landscape at Apeldoorn-Wieselseweg (Leiden 2019) 103–126.
Louwen et al. 2019b: A. J. Louwen/D. R. Fontijn/C. M. van der Linde/P. Valentijn/E. Smits/E. van Hees, Mound 3. In: A. J. Louwen/D. R. Fontijn (eds.), Death Revisited. The excavation of three Bronze age barrows and surrounding landscape at Apeldoorn-Wieselseweg (Leiden 2019) 127–152.

McKinley 1993: J. I. McKinley, Bone fragment size and weights of bone from modern British cremations and the implications for the interpretation of archaeological cremations. International Journal of Osteoarchaeology 3, 1993, 283–287.

Nunningh 1713: J. H. Nunningh, Sepulcretum Westphalico-Mimigardico-Gentile (Coesfeldt 1713).

Ort 1882: J. A. Ort, Plaatsen in de gemeente Blerick (Limburg), waar vóór-geschiedkundige, Germaansche en Romeinsche voorwerpen gevonden zijn. Publications de la Société Historique et Archéologique de la Limbourg 19, 1882, 451–462.

Probst 1996: E. Probst, Deutschland in der Bronzezeit. Bauern, Bronzegießer und Burgherren zwischen Nordsee und Alpen (München 1996).

Reimer et al. 2013: P. J. Reimer/E. Bard/A. Bayliss/J. Warren Beck/P. G. Blackwell/C. Bronk Ramsey/C. E. Buck/H. Cheng/R. L. Edwards/M. Friedrich/P. M. Grootes/T. P. Guilderson/H. Haflidason/I. Hadjas/C. Hatté/T. J. Heaton/D. L. Hoffmann/A. G. Hogg/K. A. Hughen/K. F. Kaiser/B. Kromer/S. W. Manning/M. Niu/R. W. Reimer/D. A. Richards/E. M. Scott/J. R. Southon/R. A. Staff/C. S. M. Turney/J. van der Plicht, INTCAL13 and MARINE13 radiocarbon age calibration curves 0-50,000 years cal BP. Radiocarbon 55(4), 2013, 1869–1887.
Roessingh et al. 2012: W. Roessingh/E. Drenth/R. Geerts/E. Smits/E. Lohof/B. J. Kromhout, Een urnenveld uit de Late Bronstijd – Midden IJzertijd. In: W. Roessingh/E. Blom (eds.), Graven op De Contreie. Bewoningsgeschiedenis van de Houtse Akkers te Oosterhout, van de Bronstijd tot en met de Slag om het Markkanaal (Monografie 14). ADC-rapport 2750 (Amersfoort 2012) 57–106.
Rose et al. 2022: H. A. Rose/N. Müller-Scheessel/J. Meadows/C. Hamann, Radiocarbon dating Hallstatt chronology: a Bayesian chronological model for the burial sequence at Dietfurt an der Altmühl 'Tennisplatz', Bavaria, Germany. Archaeological and Anthropological Sciences 2022, 14:72. https://doi.org/10.1007/s12520-022-01542-1.
Roymans 1991: N. Roymans, Late Urnfield societies in the Northwest European Plain and the expanding networks of Central European Hallstatt groeps. In: N. Roymans/F. Theuws (eds.), Images of the Past. Studies on ancient societies in Northwest Europe. Studies in Prae- en Protohistorie 7 (Amsterdam 1991) 9–89.
Roymans/Fokkens 1991: N. Roymans/H. Fokkens. Een overzicht van veertig jaar nederzettingsonderzoek in de Lage Landen. In: H. Fokkens/N. Roymans (eds.), Nederzettingen uit de bronstijd en de vroege ijzertijd in de lage landen. Nederlandse Archeologische Rapporten 13 (Amersfoort 1991) 1–19.
Roymans/Hoogland 1999: N. Roymans/M. Hoogland, The Early Iron Age urnfield of Beegden. In: F. Theuws/N. Roymans (eds.), Land and Ancestors. Cultural dynamics in the Urnfield period and the Middle Ages in the Southern Netherlands. Amsterdam Archaeological Studies 4 (Amsterdam 1999) 63–86.
Roymans/Kortlang 1999: N. Roymans/F. Kortlang, Urnfield symbolism, ancestors and the land in the Lower Rhine region. In: F. Theuws/N. Roymans (eds.), Land and Ancestors. Cultural dynamics in the Urnfield period and the Middle Ages in the Southern Netherlands. Amsterdam Archaeological Studies 4 (Amsterdam 1999) 33–61.

Schinkel 1994: K. Schinkel, Zwervende erven; bewoningssporen in Oss-Ussen uit bronstijd, ijzertijd en Romeinse tijd; opgravingen 1976–1986 (Leiden 1994).

https://doi.org/10.2369/9783869354439.beyond-urnfields

Smits 2019: E. Smits, Appendix 1. Summary: physical anthropological analysis of cremated remains. In: A. J. Louwen/D. R. Fontijn (eds.), Death Revisited. The excavation of three Bronze age barrows and surrounding landscape at Apeldoorn-Wieselseweg (Leiden 2019) 179–183.
Sørensen/Rebay-Salisbury 2023: M. L. S. Sørensen/K. C. Rebay-Salisbury, Death and the Body in Bronze Age Europe. From inhumation to cremation (Cambridge 2023).

Theunissen 2009: E. M. Theunissen, Midden-Bronstijdsamenlevingen in het zuiden van de Lage Landen. Een evaluatie van het begrip 'Hilversum-cultuur' (Leiden 1999).
Theuws/Roymans 1999: F. Theuws/N. Roymans, Land and Ancestors. Cultural dynamics in the Urnfield period and the Middle Ages in the Southern Netherlands. Amsterdam Archaeological Studies 4 (Amsterdam 1999).
Tol 2000: A. Tol, Opgravingen in het Hoogveld te Sittard. Campagne 1998. In: N. Roymans/A. Tol/H. A. Hiddink/F. P. Kortlang (eds.), Twee urnenvelden in Limburg. Een verslag van opgravingen te Roermond en Sittard, 1997–1998. Zuidnederlandse Archeologische Rapporten 6 (Amsterdam 2000) 93–160.
Tol 2009: A. Tol, Graven en nederzettingsresten uit de late prehistorie en volle middeleeuwen. Een archeologisch onderzoek te Weert-Laarveld. Archol-rapport 127 (Leiden 2009).

Van Beek/Louwen 2012: R. Van Beek/A. J. Louwen, Urnfields on the move: testing burial site-settlement relations in the eastern Netherlands (c. 110 –500 BC). Archäologisches Korrespondenzblatt 42, 2012, 41–60.
Van Beek/Louwen 2013: R. Van Beek/A. J. Louwen, The centrality of urnfields. Second thoughts on the structure and stability of Late Bronze Age and Early Iron Age cultural landscapes in the Low Countries. In: D. R. Fontijn/A. J. Louwen/S. A. van der Vaart/K. Wentink (eds.), Beyond Barrows. Current research on the structuration and perception of the prehistoric landscape through monuments (Leiden 2013) 81–112.
Van den Broeke 2002a: P. W. Van den Broeke, Vindplaatsen in vogelvlucht: beknopt overzicht van het onderzoek in de Waalsprong 1996–2001 (Nijmegen 2002).
Van den Broeke 2002b: P. W. Van den Broeke, Een vurig afscheid? Aanwijzingen voor verlatingsrituelen in ijzertijdnederzettingen. In: H. Fokkens/R. Jansen (eds.), 2000 jaar bewoningsdynamiek. Brons- en ijzertijdbewoning in het Maas-Demer-Scheldegebied (Alblasserdam 2002) 45–61.

Van den Broeke 2014: P. W. Van den Broeke, Inhumation burials: New elements in Iron age funerary ritual in the southern Netherlands. In: A. Cahen-Delhaye/G. de Mulder (eds.), Des espaces aux esprits. L'organisation de la mort aux âges des Métaux dans le nord-ouest de l'Europe. Études et Documents Archéologie 32 (Namur 2014) 161–184.
Van der Leije 2018: J. Van der Leije, Bewoning en begraving nabij Lenderink te Hengelo (Gelderland). Sporen uit de bronstijd, ijzertijd en middeleeuwen. Definitief archeologisch onderzoek Plangebied Winkelskamp Oost). Archol-rapport 283 (Leiden 2018).
Van der Vaart-Verschoof 2017: S. A. Van der Vaart-Verschoof, Fragmenting the Chieftain. A practice-based study of Early Iron Age Hallstatt C elite burials in the Low Countries. Papers on Archaeology of the Leiden Museum of Antiquities 15 (Leiden 2017).
Van Giffen 1937: A. E. Van Giffen, Tumuli-opgravingen in Gelderland 1935/1936. Gelre 40, 1937, 3–18.
Van Giffen 1945: A. E. Van Giffen, Het kringgrepurnenveld en de grafheuvels O.Z.O. van Gasteren, Gem. Anloo. Nieuwe Drentse Volksalmanak 63 (Assen 1945) 69–121.
Verlinde 1987: A. D. Verlinde, Die Gräber und Grabfunde der späten Bronzezeit und frühen Eisenzeit in Overijssel (Amersfoort 1987).
Verlinde/Hulst 2010: A. D. Verlinde/R. S. Hulst, De grafvelden en grafvondsten op en rond de Veluwe van de Late Bronstijd tot in de Midden IJzertijd. Nederlandse Archeologische Rapporten 39 (Amersfoort 2010).
Verwers 1972: G. J. Verwers, Das Kamps Veld in Haps in Neolithikum, Bronzezeit und Eisenzeit. Analecta Praehistoria Leidensia 5 (Leiden 1972).

Weiner 1992: A. B. Weiner, Inalienable posessions: the paradox of keeping-while-giving (Los Angelos, Oxford 1992).
Wijma et al. 1996: S. Wijma/A. T. Aerts/J. van der Plicht/A. Zondervan, The Groningen AMS facility. Nuclear Instruments and Methods in Physics Research Section B 113(1), 1996, 465–469. https://doi. org/10. 1016/ 0168-583X(95) 01420-9.

Arjan Louwen
Faculty of Archaeology
Leiden University
Leiden
The Netherlands
a.j.louwen@arch.leidenuniv.nl

https://doi.org/10.2369/9783869354439.beyond-urnfields

https://doi.org/10.2369/9783869354439.beyond-urnfields

Cups that cheered no more. Funerary rites in the urnfields of the northern Netherlands[1]

Stijn Arnoldussen and Karen M. de Vries

Keywords: Urnfields, Netherlands, funerary rites, pottery deposition, deliberate destruction

Abstract: For a series of 13 urnfields from the northern Netherlands, the roles of 'accessory vessels' in the urnfield funerary rites are studied. We propose that these accessory vessels were most likely used as drinking cups. While in some cases the fact that these drinking cups were interred with the human remains (in or without an urn) could suggest that these were personal items of the deceased, we argue that most cups recovered belonged to people attending the funeral. Based on the numbers (often more than one), the contexts in which these were recovered (often in the monuments' ditches or in pits beyond these) and their state (deliberately destroyed or placed inverted), we see these cups as reflecting rites of farewell or commemoration by the mourners. With handled cups, frequently the handle was removed prior to deposition, and the destruction of the vessel's base was common with cups of all types. These acts suggest a deliberate decommissioning of drinking cups as part of the urnfield funerary rites in the northern Netherlands.

Introduction and aim

Across much of northwestern Europe, the 13th century BCE can be identified as a period in which cremation burials rose markedly in importance (Louwen 2021, 10 and references therein). For the Low Countries, the final centuries of the Middle Bronze Age phase B (*c.* 1500–1000 BCE), the Late Bronze Age (*c.* 1000–800 BCE) and Early to Middle Iron Age periods (*c.* 800–400 BCE) are the period in which urnfield cemeteries are constructed across the Lower Rhine Basin area (Fig. 1; Willems 1935, 2; Fontijn 1996; Fokkens 1997; Roymans/Kortlang 1999; Hessing/Kooi 2005; Gerritsen 2003, 118–145; Louwen 2021). While certain elements (cremation rite, predominantly individual but clustered funerary monuments) are widely shared and denote central concepts of the ritual, regional traditions – based on variations in pottery (shape and decoration) or shape and construction of funerary monuments – are recognised (Louwen 2021, 12–13). In such approaches, the north(east)ern Netherlands are identified as belonging to the 'Ems group' (e.g. Verlinde 1987, 297; Bérenger 2008, 42; Verlinde/Hulst 2010, 103), in contrast to the southern Netherlands that are seen as part of the *Niederrheinische Grabhügelkultur* (NGK) region (*sensu* Kersten 1948; Van den Broeke 2005,

1 We dedicate this contribution to the late Groningen scholar P. B. Kooi (1943–2020), whose PhD thesis on the northern Netherlands' urnfields proved pivotal to this study.

https://doi.org/10.2369/9783869354439.beyond-urnfields

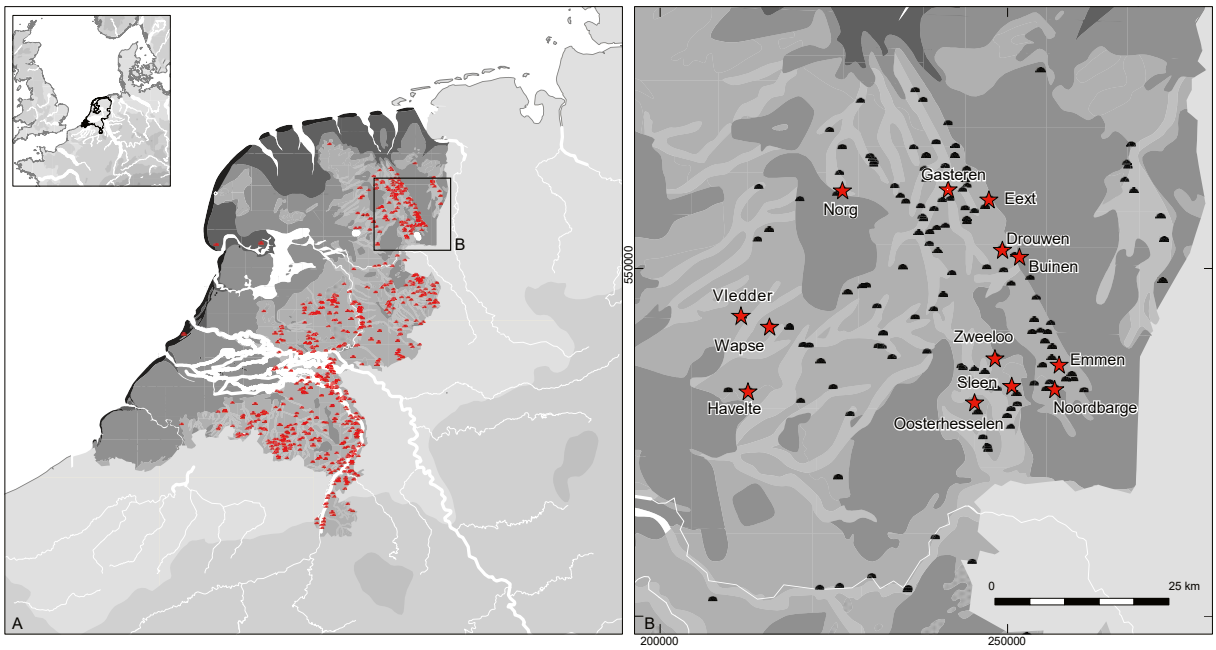


Fig. 1. a: Location of the Dutch urnfields (based on Louwen *2021) in relation to the landscape around 3800 BP (based on* De Mulder *et al. 2003, 228 fig. 143); b: Inset showing the dataset of studied urnfields from the northern Netherlands (red stars), in relation to the stream valleys (light grey, sandy soils (grey) and peat deposits (dark grey) (graphics S. Arnoldussen).*

480–481). Whilst even more small-scale regional groups have been proposed (e.g. Verlinde/Hulst 2010, 106 fig. 41), Louwen (2021, 12–14) has recently argued that this traditional focus on establishing regional cultural traits may be unhelpful in understanding the urnfield societies at large.

While this may be true, urnfields of the north(east)ern Netherlands nevertheless show characteristics less common in the southern Netherlands (cf. Hessing/Kooi 2005, 634 fig. 28.3a), suggesting that urnfield cultural traditions may in fact be (best studied) regionalised. Of these traits, many pertain to grave forms such as longbed-barrows with internal post settings (Vledder-type; Willems 1935, 75; Waterbolk 1962, 15–18; Kooi 1979, 130; Verlinde/Hulst 2010, 105), wider longbed-barrows (Noordbarge-type; Kooi 1979, 130; Arnoldussen/Scheele 2012, 174 fig. 9; Arnoldussen/Albers 2015, 155) or keyhole-shaped monuments (Willems 1935, 56; Verlinde/Hulst 2010, 103; Arnoldussen/Albers 2015, 156 fig. 41). All these types of grave forms tie in with funerary traditions in adjacent northwestern Germany (cf. references in Scheele 2016, 81 table 1; Rüschoff-Thale 2004; Brink-Kloke et al. 2006; Wilbertz 2009; Hoffman 2012). A less often noted characteristic of urnfields from the northern Netherlands is the presence of a '[...] relative abundance of ceremonial pottery in the ditches […]' (authors' translation; Verlinde/Hulst 2010, 103). If true, this could mean that the northern Netherlands' urnfields are particularly suitable to study those parts of the funerary rites that involved pottery deposition (cf. Waterbolk 1957, 57–58; Kooi 1979, 135; Hessing/Kooi 2005, 640; Louwen 2021, 144). In this paper, we will make a case that in the northern Netherlands' urnfields (a) drinking cups were commonly left behind as part of the funerary rites, that (b) the context, numbers and placements of these cups are often incongruent with simple explanations as 'funerary gifts', and (c) that such drinking cups were frequently deliberately decommissioned by removal of their handles or bases.

https://doi.org/10.2369/9783869354439.beyond-urnfields

Despite the general correspondence between cremated human remains and pottery vessels (urns) in urnfields, often additional ceramic vessels are found during urnfield excavations.[2] In some cases, these concern double interments or urns added secondarily to older monuments (e.g. Waterbolk 1957, 56–57; Kooi 1979, 94 fig. 89), and in other cases other pots or pot fragments functioned as lids (Fig. 2). In this contribution, however, we will focus on the – frequently smaller – pots that were placed in the cemeteries known colloquially as 'accessory vessels' (Dutch: *bijpotjes*). Whilst a minority of smaller (see below for the ambiguity of size classification, esp. Fig. 3) pots were used as urns proper (i.e. to hold human remains; e.g. ZWE 8: Willems 1935, 125 fig. 25), the majority of these were found empty.

One of the reasons for (re)studying the tentative drinking cups in urnfields is the fact that their precise function is presently unknown. The lack of understanding of their function can be seen in the various names these vessels have been given: 'additional pots' (Dutch: *bijpotjes*; e.g. Van Giffen 1945, 99–121; Hissel 2012, 125), 'accessory vessels' or 'miniature vessels'. The fact that Kooi (1979, 19) used a non-exclusive definition based on form and usage moreover blurs categories. Kooi (1979, 19) identifies 'miniature pots' as vessels of similar same shape as urns, but ⅓ to ¼ in size (i.e. a formal de-

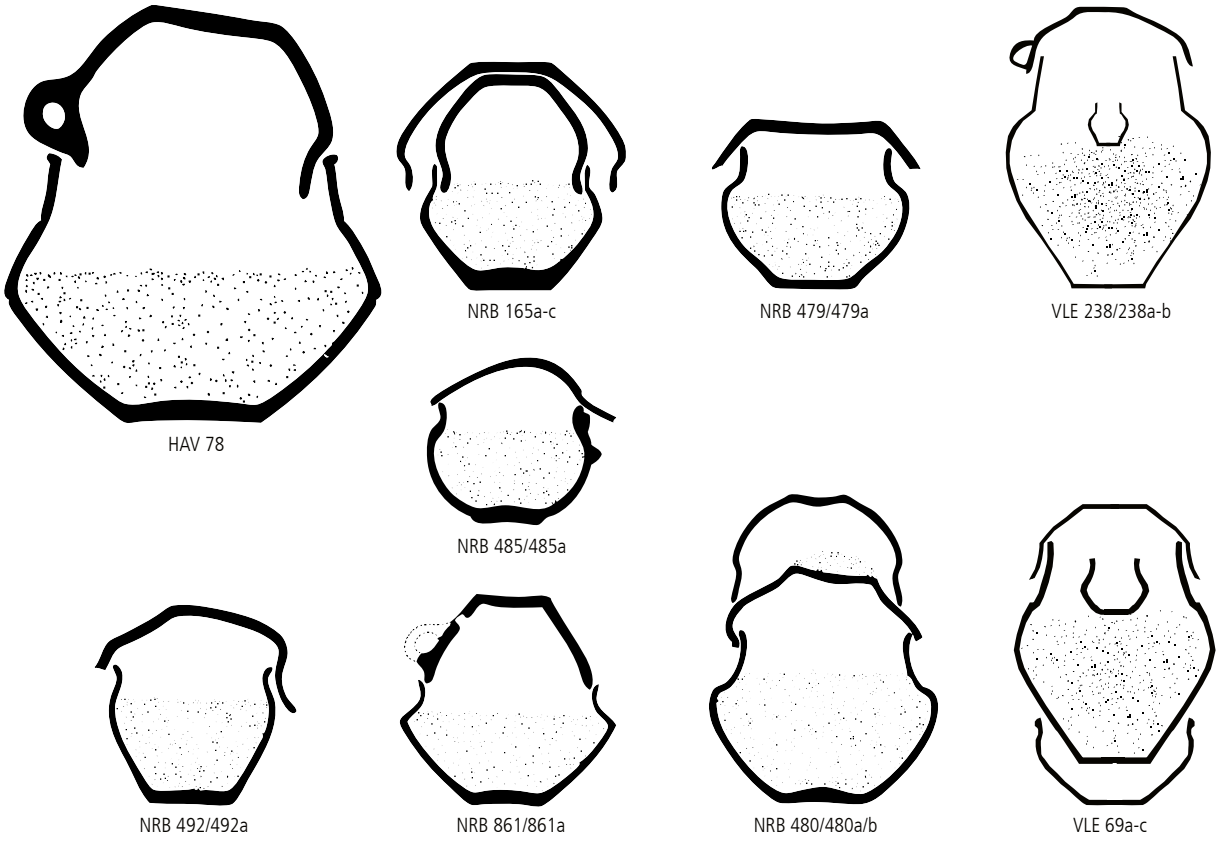


Fig. 2. Example of urnfield interments with extra pots/pot fragments used as lids from the Noordbarge (NRB), Havelte (HAV; after Kooi 1979, 52 fig. 42; 88 fig. 83) and Vledder (VLE; after Van Giffen 1938, Abb. 24) urnfields (graphics S. Arnoldussen, using originals taken from Kooi 1979 and Van Giffen 1938).

2 Here we use abbreviations for key sites (e.g. Bui = Buinen, D52 = Drouwen – 1952, EWB = Emmen-Wolfsbergen, HAV = Havelte-Koningskamp, NRB = Noordbarge, SLN = Sleen – near the church, VLE = Vledder, WAP = Wapse, ZWE = Zweeloo). A full list with primary references can be found in Table 1.

https://doi.org/10.2369/9783869354439.beyond-urnfields

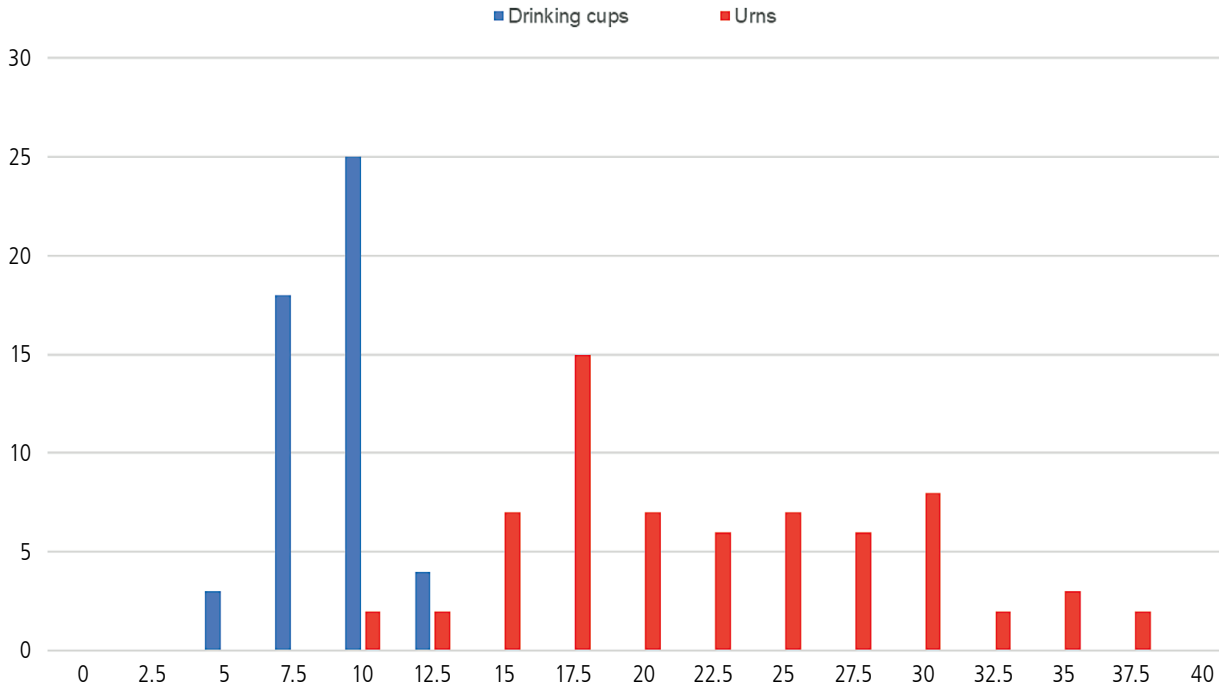


Fig. 3. Sample (after Kooi 1979, 32–44) of Noordbarge pots classified by pot height (x-axis). Only drinking cups (n = 50) and urns (n = 67) for which the height was reconstructable were incorporated (graphics S. Arnoldussen).

finition), whereas he defines 'accessory vessels' in terms of their position and state in the cemetery (i.e. a functional definition). According to Kooi (1979, 19) accessory vessels are those pots: (a) placed in the burial pit (implicit; *with/in addition to* the urn), (b) pottery used to seal the urn (i.e. lids), (c) sherds found with cremated remains (sometimes secondarily burned, i.e. fragmented pots with cremation), (d) pottery placed in ditches around burials, be it scattered, intact or in sherds. There is ample room for confusion, as a small *Henkeltasse* used to contain cremated remains (e.g. NRB 485; Kooi 1979, 42 fig. 32) would be classified as an 'urn', whereas a similarly sized *Henkeltasse* placed with an urn in the centre of a ring-ditch (e.g. NRB 15a; Kooi 1979, fig. 22) would be labelled an 'accessory vessel', whereas no categorisation exists for *Henkeltassen* found in between funerary monuments (e.g. SLN 28; Kooi 1979, 57 fig. 48).

Essentially, the role of accessory vessels in the urnfield funerary rites is as yet poorly understood. Based on size (see below; Fig. 3) and form (especially the cups with handles known as *Henkeltassen*), a function as drinking cups is generally assumed (cf. Modderman/Louwe Kooijmans 1966, 21; Verlinde 1987, 308; Verlinde/Hulst 2010, 31; Louwen 2021, 120, 126). Whilst it seems worthwhile to test this assumption through chemical study and botanical residues (cf. Stika 2011; Guerra-Doce 2014; Mötsch et al. 2019; Rageot et al. 2019), we will here axiomatically assume that these 'accessory vessels' served to contain a liquid of sorts. It is striking that the contexts, positions and state in which such drinking cups have been retrieved are highly variable. They occur, for example, as intact cups within an urn comprising human remains (e.g. NRB 442; Kooi 1979, 31 fig. 21, 41 fig. 31), as broken cups inside the urn (e.g. SLN 33; Kooi 1979, 57), found intact in the monument's ditch (e.g. EWB 5; Kooi 1979, 103 fig. 98, 195), broken-up and distributed across barrow ditches (e.g. BUI 19; Kooi 1979, 72 fig. 65), or placed in pits as single cups (e.g. D52 3; Kooi 1979, 98, 99 fig. 94–95) or assemblages of multiple cups placed in a pit (e.g. D52 7/8/9; Kooi 1979, 98 fig. 93). We believe that this diversity in contexts (inside urn, with urn, without urn), state (unscathed, fragmented, burned secondarily) and placement (inverted, sideways) of such drinking cups hold valuable information to their original roles in the urnfield period funerary rites. To capitalise on this information, however,

https://doi.org/10.2369/9783869354439.beyond-urnfields

requires a more systematic discussion of context, state and position for urnfield drinking cups as well as consideration of the correlations with types of funerary monuments (e.g. ring-ditches, keyhole-shaped ditches, longbed-barrows), position within the urnfield (e.g. centre, periphery, along roads) and associated additional objects. Here, we present the results of a provisional study of these parameters for 13 smaller and larger urnfields from the northern Netherlands (Fig. 1b) that in total comprised an excavated number of 1,495 graves (and 311 cases of accessory vessels studied).

To avoid bias introduced by the shape or recovery context of possible drinking cups, we investigated the position (with cremated remain, with an urn, in a ditch, isolated finds/no peripheral structure), contextual positioning (inside the urn, underneath the urn, placed inverted/sideways, etc.) and state (intact, fragmented, fragment) of all 'smaller' vessels. No metric threshold of pot height was used beforehand (as not to exclude data beforehand), but for the site of Noordbarge a sample of the pot height for urns and presumed drinking cups was measured (Fig. 3). These show that a bimodal distribution in pot height is evident, with 12.5 cm pot height as the plausible separator of pots used as urns and tentative drinking cups.

For a total of 13 urnfields (Table 1; Fig. 1b) we systematically inventoried the location, position, state and association of the presumed drinking cups.[3] The urnfields were chosen based on (a) the availability and quality of object drawings, (b) their geographic distribution across the northern Netherlands, and (c) their variation in excavation extent, in order to ensure a sample of sufficient quality, size and geographic scope.

Results

A shared tradition?

It is clear that accessory cups were part and parcel of the urnfield funerary rites across the area studied – on average 17.5 % of the graves contained drinking vessels either with the cremated remains or in the ditch (Table 2). Additionally, drinking vessels were placed in between funerary monuments at nearly all sites. The two trends above apply to all the urnfields that were excavated to a sufficiently

Table 1. Main urnfields studied, with excavated surface areas, estimated numbers of graves uncovered and main references listed.

Site	Site abbreviation	Excavated area (ha)	Number of graves	Main references
Havelte-Koningskamp	HAV	0.83	111	Kooi 1979, 77–90
Wapse	WAP	0.39	250	Van Giffen 1936; Waterbolk 1957; Scheele 2016
Norg-De Fledders	NDF	0.083	21	Kooi 1979, 113–1216
Gasteren	GAS	0.45	96	Van Giffen 1941; 1945
Eext-Zwanemeer	EZM	0.003	2	Kooi 1979, 120–124
Drouwen (1939, 1940/41, 1951/52)	D39 / D40 / D51 / D52	0.29	21	Van Giffen 1943; Butler 1965; Kooi 1979, 90–96
Buinen	BUI	0.706	78	Kooi 1979, 55–77
Zweeloo	ZWE	0.358	51	Willems 1935
Sleen – near the church	SLN	0.822	116	Kooi 1979, 26–55
Vledder	VLA	0.928	318	Van Giffen 1938
Oosterhesselen-Bergakkers	OBA	0.089	15	Kooi 1979, 116–118
Noordbarge-Hoge Loo	NRB	3.091	390	Kooi 1979, 10–52
Emmen-Wolfsbergen/Heidehiem	EWB	0.065	40	Kooi 1979, 96–104

3 This data set is rendered available open access at: https://doi.org/10.34894/YFS33D.

https://doi.org/10.2369/9783869354439.beyond-urnfields

*Table 2. Context of accessory vessels for the urnfields studied. * = Norg, Oosterhesselen, Eext.*

	Noord-barge	Sleen	Buinen	Gasteren	Drou-wen	Havelte	Emmen	Zwee-loo	Vledder	Wapse	others*	**Overall total**
Found with urn and cremation	25	7	1	11	1	3	0	5	14	7	0	**74**
Found with crema-tion (without urn)	17	3	1	0	1	8	1	1	12	8	3	**55**
Found in between graves	7	5	2	10	22	2	0	1	3	0	1	**53**
Found in ditches, intact	20	11	7	1	0	3	7	1	4	4	2	**60**
Found in ditches, broken	20	23	10	0	0	8	3	0	1	7	0	**72**
Total	**89**	**49**	**21**	**18**	**24**	**24**	**11**	**8**	**34**	**27**	**6**	**311**
Total graves	**390**	**116**	**78**	**96**	**21**	**111**	**32**	**48**	**318**	**250**	**35**	**1,495**
% of graves with accessory cups in ditches	10.3	29.3	21.8	1	0	9.9	31.3	2.1	1.6	4.4	5.7	**8.8**
% of stray acces-sory cups / graves	1.8	4.3	2.6	10.4	104.8	1.8	0.0	2.1	0.9	0.0	2.9	**3.3**

large extent so that over 30 graves could be mapped. This indicates that the incorporation of accessory vessels was part of a shared narrative of urnfield rites at the supra-local level. Yet, despite such communalities, a local adaptation may be identifiable.

For example, the placement of drinking cups in the monuments' ditches was very common at Buinen, Sleen and Emmen (21.1–31.3 % of the graves), whereas at Gasteren, Drouwen and Zweelo such cups were placed less frequently (0–2.1 % of the graves) in the ditches. The placement of accessory cups with human remains (in urns or simply with the cremated remains) was common at Noordbarge, Gasteren, Drouwen, Havelte and Zweelo (9.52–12.5 % of the graves), yet is hardly documented for Buinen and Emmen (2.5–3.13 % of the graves). Similarly, while accessory vessels were left (in pits) beyond and between the funerary monument at various sites, their prominence in this area was notably higher at Gasteren and Drouwen (see below; see also Fig. 7). These local variations show that – while adhering to supra-regional set norms for funerary rites in the urnfield period – there was ample bandwidth for local variations and articulations. People could locally choose to change the numbers and locations of accessory cups left behind, but overarching narratives of proper rule-sets were still being adhered to. In what follows, we will discuss some of these 'rule-sets', starting with the importance of fragmentation and dispersal of drinking cups.

The salience of fragmentation and separation

Upon deposition, drinking vessels may have been deliberately fragmented, parts retained (often bases and handles are missing) with their sherds being placed in different parts of the ditches (Fig. 4). For example, at Noordbarge, sherds of a biconical (drinking?) bowl (NRB 969/966, lacking its base) were placed in the eastern and northern section of the ring-ditch around its central interment (NRB 985; Kooi 1979, 50 fig. 40, 189). Similarly, at Buinen, the ring-ditch around the cremation interment of BUI 16 (no urn) contained the sherds of a small biconical drinking cup (BUI 19) that was placed partly in the eastern and southwestern segments of the ring-ditch (Kooi 1979, 72 fig. 65). On top of the sherds in the eastern part of the ditch, a decorated *Henkeltasse* that had its handle removed (BUI 18) was placed on the sherds of the undecorated cup (Kooi 1979, 69, 72 fig. 65, 135). In the ring-ditch of BUI 109 (cremation, no urn), sherds of a single bowl with rows of circular impressions (BUI 117) and another accessory vessel were placed in three parts of the eastern segment of the ditch, while an

https://doi.org/10.2369/9783869354439.beyond-urnfields

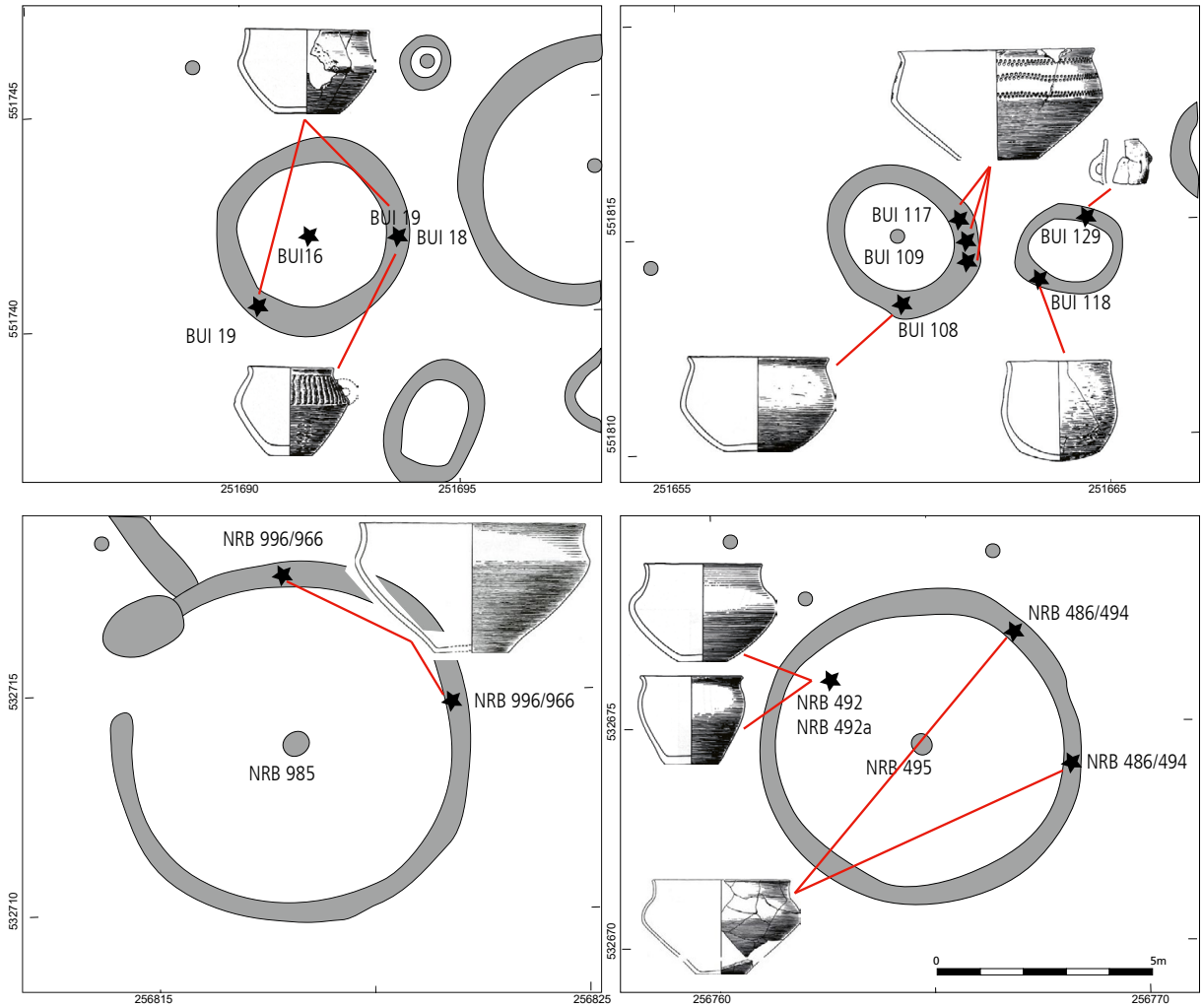


Fig. 4. Examples of drinking cups spread over different parts of monument ditches (data after Kooi 1979, 42 fig. 32, 50 fig. 40, 72 figs. 65–70, 76 fig. 69, 77 fig. 70). Pottery all to the same scale (height of NRB 996/966 is 14.8 cm), except for NRB 486/494 (half scale) (graphics S. Arnoldussen, using originals taken from Kooi 1979).

intact *Schräghals*-cup (BUI 108) was placed in the southern part of the same ring-ditch (Kooi 1979, 76–77, 191).

Similarly, sherds of a single *Cylinderhals*-urn (NRB 486/494) were placed in two parts of the ring-ditch of NRB 495 (Kooi 1979, 42 fig. 32). In between the central grave (NRB 495) and the circular ditch, two tentative drinking cups were placed (NRB 492 and 492a; Kooi 1979, 42 fig. 32). Here, perhaps, both the serving vessel (NRB 486/494; broken and distributed across the ditch) and drinking cups were left at the grave. The 1952 excavation at Drouwen also yielded a possible example of large sherds of a destroyed serving vessel (D52 6: *Harpstedter Rautopf*; Kooi 1979, 99 fig. 94) that was deposited with two cups (Kooi 1979, 94). This echoes the situation of NRB grave 945, in the ring-ditch of which in separate spots fragments of an accessory vessel (drinking cup; NBR 982) and a large container (NBR 942: *Zweihenklige Terrine*; serving vessel?) were found.

At Drouwen, a small bowl or drinking cup (D51 1) was burnt secondarily and a few sherds were placed first into the burial pit (Kooi 1979, 94), after which a *Harpstedter Rautopf* containing the cremation was placed on top of the sherds of the drinking cup (Kooi 1979, 96 fig. 91). At 60 cm to the south, rim sherds of a *Schräghals*-cup were topped with a decorated *Henkeltasse* (D52 10)

https://doi.org/10.2369/9783869354439.beyond-urnfields

and another *Henkeltasse* (undecorated; D52 11; Kooi 1979, 99 fig. 94) placed on top. At Emmen-De Wolfsbergen, the ring-ditch around an interment accompanied by a *Schräghals*-urn (EWB 6; Kooi 1979, 104 fig. 99) contained the fragments of two accessory cups (EWB 8) in the southern part of the ditch, while two intact cups were placed in the southeast (EWB 7) and north-northwest segments of the ditch (Kooi 1979, 103 fig. 98, 195). A few hundred meters to the south, at Emmen-Heidehiem, an accessory vessel (EWB 9; Kooi 1979, 194) was fragmented into three pieces and placed in the ditch southeast of the central interment (a cremation placed in a biconical urn; Kooi 1979, 105 figs. 101–103). In the opposing ditches of two longbed-barrows at Noordbarge, sherds of accessory vessels were placed (NBR 763–764; 801–802; Kooi 1979, 48 fig. 38, 188).

The preference for the destruction of drinking vessels (prior to deposition) is also clear from the cases in which accessory vessels (shielded inside an urn) were found missing their bases or handles – or just consisted of a few fragments that were placed with the pyre remains in the urn. Such cases – often involving *Henkeltasse*-cups – have been noted for Noordbarge, Sleen and Zweelo (Table 3).

The patterns observed for incomplete drinking vessels buried in the shielded environment of the urn may help to argue that the incomplete drinking cups recovered with cremations cannot be simply explained as cups that perished in the pyre and were incompletely collected for burial. Rather, it seems that cremations interred without a ceramic urn were also accompanied by destroyed drinking cups (Table 4). Whereas one could argue that *Henkeltasse*-cups that had their handles removed could still be functioning cups, the structural pattern of removal of bases for the other drinking cups is a clear sign of deliberate decommissioning (Fig. 5).

Table 3. Examples of fragmented accessory vessels placed in ceramic urns.

Site	Cup	Context	State	References
Drouwen 1952	D52 2	In urn	Fragmented (base removed)	Kooi 1979, 99 fig. 94–95
Sleen	SLN 33	In urn	Base removed	Kooi 1979, 57
Sleen	SLN 127	In urn	Fragments of (biconical) cup	Kooi 1979, 60
Noordbarge	NRB 674a	In urn	Rimsherds of cup	Kooi 1979, 47 fig. 37
Zweelo	ZWE 7a	In urn	Fragment of cup	Willems 1935, 125
Zweelo	ZWE 10	In urn	Broken *Henkeltasse*	Willems 1935, 126
Zweelo	ZWE 13	In urn	*Henkeltasse*, handle removed	Willems 1935, 126
Zweelo	ZWE 17a	In urn	*Henkeltasse* fragment	Willems 1935, 128 Afb. 20
Gasteren	GAS 33a	In urn	Incomplete cup	Van Giffen 1945, 110 Afb. 21

Decommissioning cups

In the above, we have hinted at the deliberate decommissioning of drinking cups prior to deposition. Several strategies appear to have been in play simultaneously: (a) removal of vessel bases (with cups of all types), (b) removal of vessel handles (with *Henkeltasse*-cups), (c) inclusion of small fragments/sherds, and (d) secondary burning of vessels. To start with the latter, it is not always clear whether accessory cups showing traces of secondary burning received these on the pyre (i.e. indicating a possible former use as funerary gifts; cf. Louwen 2021, 120) or as a result of deliberate acts of destruction as parts of the funerary rites afterwards (i.e. to render drinking cups defunct). For both scenarios, examples can be identified. For example, the secondarily burnt cup with *Kalenderberg*-decoration placed with the cremated remains of NRB 285 (Kooi 1979, 37 fig. 27, 185) may have been on the pyre. Similarly, various vessels burnt secondarily were found in the Middle Iron Age barrows at Eext-Zwanemeer (Kooi 1979, 121 fig. 128, 122 fig. 129, 124) amidst cremated remains and equally burnt bronze personal ornaments. Less clear is the case at Drouwen (excavation campaign 1951), where a cup (D52 1a) was burned secondarily but only fragments of it were placed *underneath* the urn (Fig. 6;

https://doi.org/10.2369/9783869354439.beyond-urnfields

Table 4. Examples of fragmented accessory vessels placed with cremated remains.

Site	Cup	Context	State	References
Noordbarge	NRB 173	With cremation	Base removed	Kooi 1979, 35
Noordbarge	NRB 401	With cremation	Base removed	Kooi 1979, 40
Noordbarge	NRB 452	With cremation	Base removed	Kooi 1979, 41
Noordbarge	NRB 549	With cremation	Base removed	Kooi 1979, 44
Noordbarge	NRB 697	With cremation	*Henkeltasse*, handle removed	Kooi 1979, 48
Zweelo	ZWE 25/25a	With cremation	Broken cup and half of second cup	Willems 1935, 130 Afb. 20–21
Sleen	SLN 51	With cremation	Base removed	Kooi 1979, 58
Sleen	SLN 176	With cremation	Lacking rim	Kooi 1979, 62
Buinen	BUI 44	With cremation	Lacking rim	Kooi 1979, 74
Havelte	HAV 33	With cremation	Rim fragment	Kooi 1979, 87 fig. 82–84
Havelte	HAV 35	With cremation	Rim fragment	Kooi 1979, 87 fig. 82–84
Havelte	HAV 62	With cremation	Based removed, inverted on cremation	Kooi 1979, 87 fig. 82–84
Eext	EZM 1	With cremation	Fragments of 5 accessory cups	Kooi 1979, 121–122
Vledder	VLE 282	With cremation	*Henkeltasse*, handle removed	Van Giffen 1938, Abb. 24
Vledder	VLE 169	With cremation	Half missing	Van Giffen 1938, Abb. 24
Wapse	WAP 13b	With cremation	Sherds	Waterbolk 1957, 46 tab. 1
Wapse	WAP 45b	With cremation	Sherds	Waterbolk 1957, 47 tab. 1
Wapse	WAP 58b	With cremation	Sherd	Waterbolk 1957, 47 tab. 1, fig. 25
Wapse	WAP 48	With cremation	Sherds	Waterbolk 1957, 47 tab. 1, fig. 25

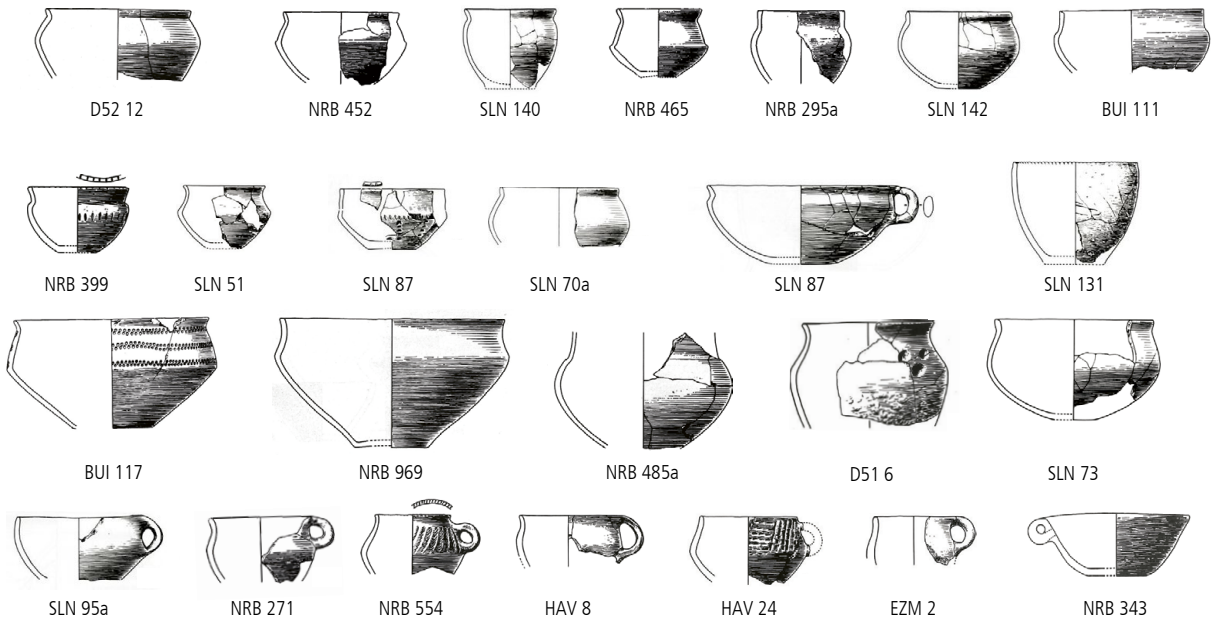


Fig. 5. Examples of drinking cups whose bases had been destroyed or removed in urnfields from the northern Netherlands (after Kooi 1979, 37 fig. 27, 38 fig. 28, 40 fig. 50, 41 fig. 31, 44 fig. 34, 58 fig. 49, 59 fig. 50, 61 fig. 52, 77 fig. 70, 87 figs. 82–84, 99 figs. 94–95, 122 fig. 129). Pottery all to the same scale (the reconstructed height of SLN 131 is 12 cm) (graphics S. Arnoldussen, using originals taken from Kooi 1979).

https://doi.org/10.2369/9783869354439.beyond-urnfields

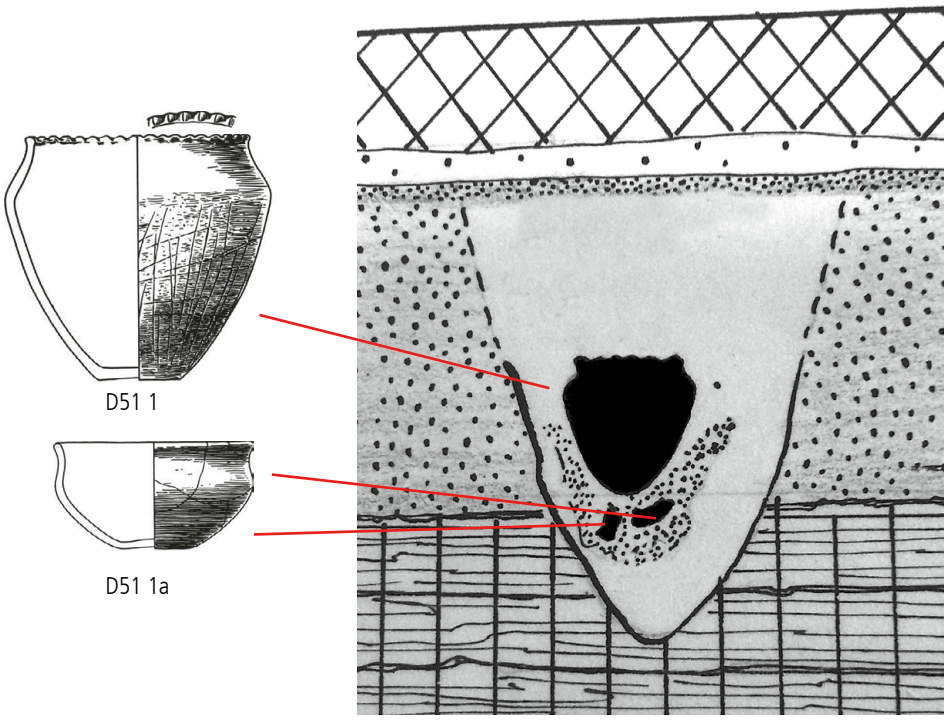


Fig. 6. Drouwen. Position of the fragmented and secondarily burned drinking cup D51 1a underneath the Harpstedter Rautopf *D51 1 (after Kooi 1979, 96 fig. 91). Pottery all to the same scale (height of D51 1 is 23.6 cm) (graphics S. Arnoldussen, after Kooi 1979 and original fieldwork documentation).*

a large *Harpstedter Rautopf* with the cremation; Kooi 1979, 96). Paradoxically, this case seems to stress both an association to a deceased person (i.e. being in the same pit), as well as a deliberate disjunction between the position of the human remains and the former cup.

An overview of the treatment of the various non-intact accessory cups across the 13 urnfields studied (Table 5) shows clear patterns. Cups with handles (*Henkeltassen)* were frequently interred in a broken state, with a clear preference for leaving behind just a few fragments of *Henkeltassen* (often decorated with fingertip impressions). Removal of the *Henkeltasse* bases and handles was also common. For the other cups, the same strategies are visible – placing just a few fragments of a drinking cup was the most common option, followed by the removal of the vessel's base. The high frequency of base removal (17.7 %) and other modes of fragmentation (32.4 %) for accessory vessels strengthens the interpretation of reflecting intentional acts.

Bottoms up – signalling end of use through the inverted placement of cups

The inverted position of drinking cups upon deposition may – in addition to, or as alternative to, their fragmentation – be another way to signal the end of their practical use life. The intentionality of this particular placement is clear from cases where – shielded within the urn – one cup was placed upright and one inverted (NRB 157a; Kooi 1979, 52 fig. 4). In other cases, multiple cups were placed inverted over cremated remains (HAV 60/60a; Kooi 1979, 85, 87) or in the ditches of funerary monuments (SLN 48/49; Kooi 1979, 58, 189). These rarer cases are supplemented by many others of inverted single cups being left in urns (e.g. HAV 7; Kooi 1979, 87, 192), on cremations without urns (e.g. HAV 62; Kooi 1979, 87, 192), placed in ring-ditches (e.g. ZWE 15; Willems 1935, 128; Afb. 21) or found as 'stray' finds between monuments (e.g. SLN 28; BUI 86; Kooi 1979, 57, 76 fig. 69, 192). We argue that placing such cups in a non-functional position was part of the rites to properly dispose of

https://doi.org/10.2369/9783869354439.beyond-urnfields

Table 5. Treatment of the non-intact accessory cups.

	Noord-barge	Sleen	Buinen	Havelte	Emmen	Drou-wen	Eext	Zwee-loo	Wapse	Gasteren	Vledder	**Totals**
Fragments in urn	1	1						1				**3**
Fragments with cremation							1	1	4		2	**8**
Fragments in ditch	5	1	2	1	2				7			**18**
Fragment, stray						2				10		**12**
Henkeltasse, handle removed	3	1	1	2				1			1	**9**
Henkeltasse, base removed	1	5		1								**7**
Henkeltasse, base and handle removed		1	2	1								**4**
Henkeltasse, broken (other)	2	5	2	1				2	4	1		**17**
Other cups, base removed	13	12	5	4		2					1	**37**
Other cups, rim removed	1	1	2	1								**5**
Other cups, broken (other)	12	8	1	8	4	2	1	2	8	1		**47**

such vessels as part of the urnfield rites in general (cf. Louwen 2021, 173). In what follows, we argue, based (a) on their position beyond the funerary monuments and (b) the frequently multiple numbers recovered, that such cups are more likely to have belonged to the mourners than to the deceased.

Leaving the cups behind – 'stray finds of drinking vessels'

Whereas we have shown in the above that drinking cups were frequently disposed of in the surrounding ditch (and less frequently with the central interment), there is also solid evidence that some of these vessels were purposefully dug into the soils in the areas around and in between the funerary monuments. For example, in the section of the urnfield of Drouwen excavated in 1939 (Van Giffen 1943; Kooi 1979, 92 fig. 87), no less than nine out of the ten accessory vessels were recovered from between the ditches (and just one with cremation remains centrally in a ring-ditch; Kooi 1979, 193). At 1,600 m to the west-northwest of these, a keyhole-shaped funerary monument was uncovered in 1952, where 4 m to the west of it at least 14 small cups were left behind (Fig. 7). Two cups (D52 4 and 5) were placed with large sherds of a *Harpstedter Rautopf* (D52 6; Kooi 1979, 99 fig. 9). Cups B52 7, 8 and 9 were placed together (all sideways to inverted) in a pit (Kooi 1979, 98 fig. 93). Two *Henkeltassen* were placed on top of each other and on top of rim sherds of a *Schräghals*-cup (Kooi 1979, 99 fig. 94). At *c.* 7 m to the northwest, two more cups (D52 14–14a) were found placed upright next to each other in a pit (Kooi 1979, 94), with another set of a cup and *Henkeltasse* (D52 16/16a) close-by (Kooi 1979, 99 fig. 95).

In the Noordbarge urnfield, a set of two cups (a biconical urn that had its bottom removed and an intact *Henkeltasse*; NRB 537) were placed in between the ring-ditches without any cremated remains (Kooi 1979, 43 fig. 33, 186). Similarly, a decorated *Henkeltasse* and open bowl that both had their bases removed were deposited together in a pit in between ring-ditches at Noordbarge (NRB554; Kooi 1979, 44 fig. 34, 187). In the Sleen urnfield, two *Henkeltasse* cups (both incomplete; SLN 147; 160) were placed to either side of a tentative road trajectory (Kooi 1979, 61–62, 190). At Buinen, sherds of accessory vessels were found at various locations between the funerary monuments (e.g. BUI 21; 23; 30; Kooi 1979, 191). At other sites, finds listed simply as 'stray finds' (such as the *Henkeltasse* NRF 12; Kooi 1979, 115 fig. 118) may in fact be the results of similar depositions.

https://doi.org/10.2369/9783869354439.beyond-urnfields

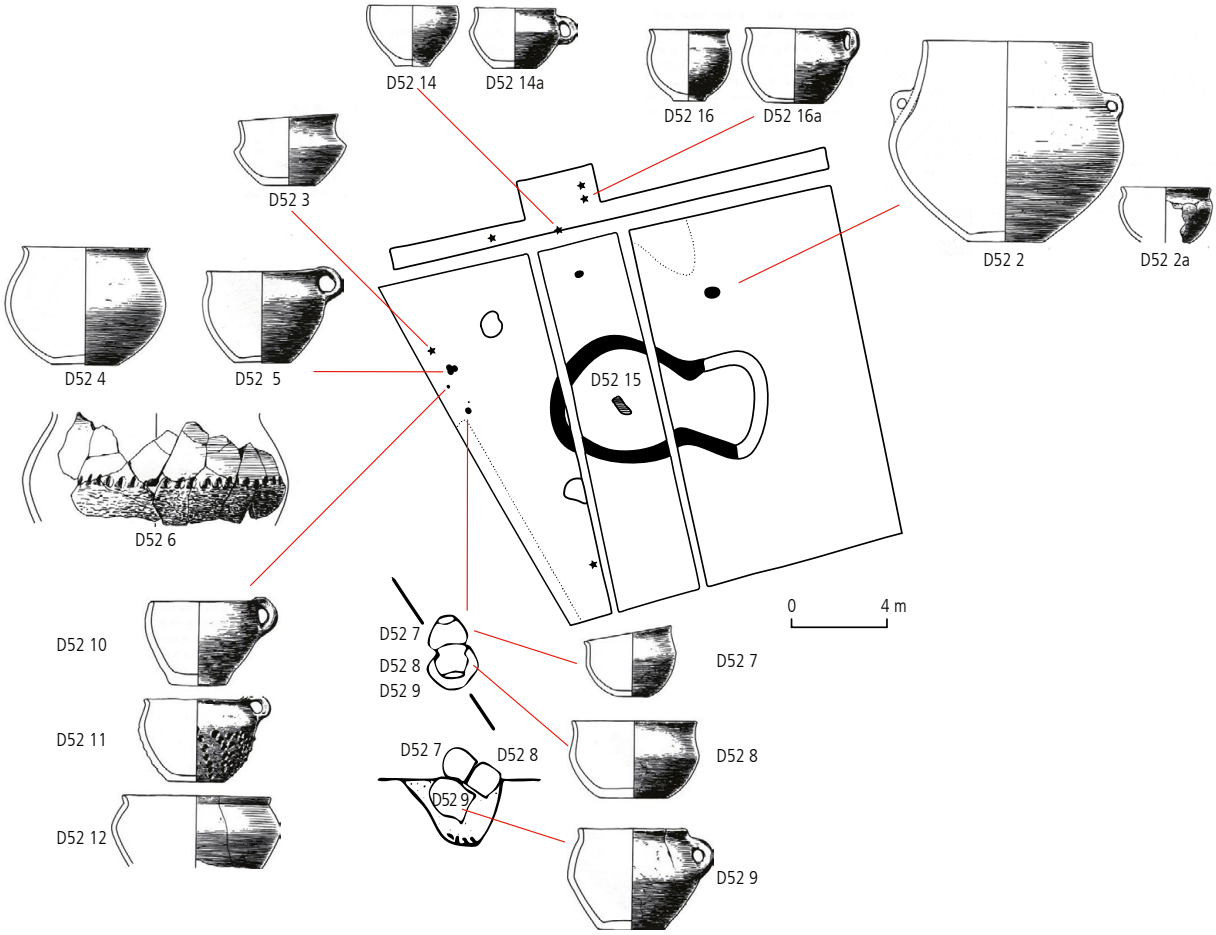


Fig. 7. Distribution of drinking cups around Drouwen (D52 15, a keyhole-shaped funerary monument; after Kooi 1979, 98 fig. 93, 99 figs. 94–95). Pottery all to the same scale (height of D52 2 is 21.6 cm) (graphics S. Arnoldussen, using originals taken from Kooi 1979).

Drinking alone or with a crowd?

Whereas singular cups included with the cremated remains may be interpreted as personal belongings of the deceased, a number of cases is known in which more than one drinking vessel is placed in the ditch of the funerary monument (Fig. 8). Based on their position (literally detached from the deceased) and number (more than one), the plausibility of these representing drinking cups once owned personally by the deceased is limited. Rather, we suggest that these are the drinking cups left behind by a small number of persons with social ties to the deceased (be it household members, kin, or friends) as part of the funerary rites. Evocatively, but speculatively, we suggest scenarios in which bystanders at the funeral – after deposition of the human remains, sometimes with their (decommissioned; Tables 3–4) personal cup – make a final toast and afterwards deposit the cups used. This could apply both to rites executed upon interment, but equally well as later commemorative acts.

At Sleen, a funerary monument is known in whose ditch five drinking cups were placed (Fig. 8, top left). Significantly, all cups but one (SLN 71) were rendered defunct prior to deposition by way of removal of the vessel's base. Moreover, SLE 48 and SLE 49 were buried upside down in the ditch. In the ring-ditch of Emmen-De Wolfsbergen (excavated in 1956), two possibly intact (EWB 2; EWB 7) and two fragmented accessory vessels (both listed as EWB 8) were deposited (Fig. 8, bottom left; Kooi 1979, 104 fig. 99, 194). At Buinen, an accessory cup was placed sideways with the cremated remains (BUI 114), and an intact (BUI 113) and at least three fragmented cups (BUI 111–112) were placed

https://doi.org/10.2369/9783869354439.beyond-urnfields

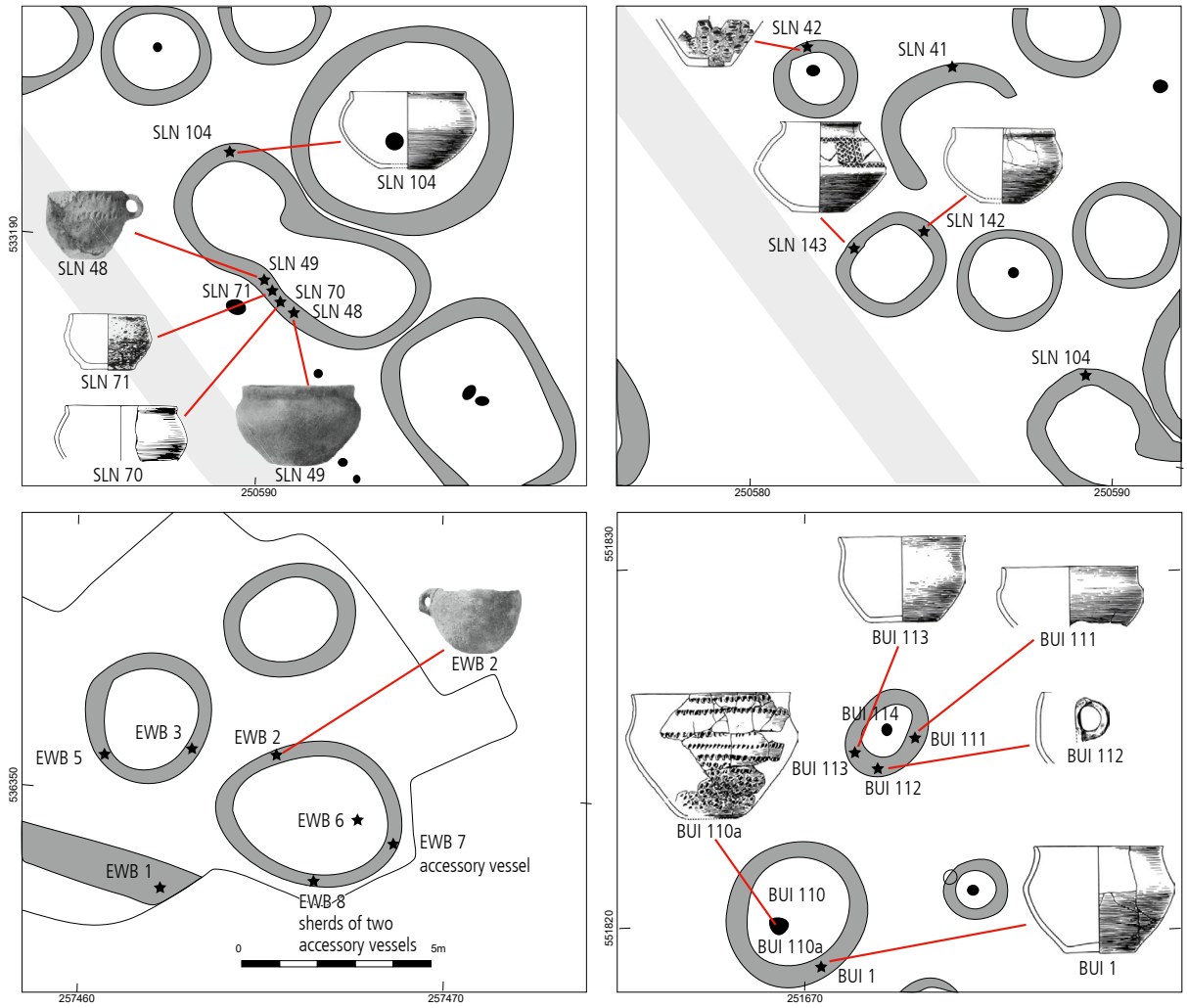


Fig. 8. Examples of urnfield contexts in which multiple drinking cups were interred (top row: Sleen; after Kooi 1979, 58 fig. 49, 60 fig. 51, 61 fig. 52), bottom left: Emmen-De Wolfsbergen (after Kooi 1979, 104 fig. 99), bottom right: Buinen (after Kooi 1979, 72 figs. 65–70, 77 fig. 70). Pottery all to the same scale (height of SLN 104 is 9.5 cm) (graphics S. Arnoldussen, using originals taken from Kooi 1979).

in the ditch around. As at Sleen, one of the cups (BUI 111; Kooi 1979, 192) was placed in the ditch upside-down. Generally, however, the number of cups placed in the ditches is more modest (Table 6), like the two examples of SLE 142/143 show (Fig. 8, top right; Kooi 1979, 61 fig. 52). One of these cups (SLE 142; Fig. 5) had part of its base removed prior to deposition.

In our opinion the documented cases of more than one drinking cup placed inside an urn or ditch strengthen the suggestion that these belonged to mourners rather than to the deceased. Whereas personal social traits such as generosity could be stressed by placing multiple cups with the cremated remains, this interpretation cannot elegantly explain cases where three to five drinking cups were placed in the ditches proper (Table 6). Another argument in favour of seeing these (decommissioned) cups as belonging to the mourners is the fact that several cases are known in which the central interment contained a (private?) drinking cup, but additional ones were found in the ditches of the funerary monument (e.g. SLN 84–87a–c: Kooi 1979, 59 fig. 50; SLN 127–128; Kooi 1979, 60–61 figs. 51–52).

https://doi.org/10.2369/9783869354439.beyond-urnfields

Table 6. Examples of sites with more than one accessory vessel.

Number of cups	Site	Cups	Context	State	References
> 14	Drouwen 1952	D52 6-16a	Outside of ditch	Buried single, in pairs and groups of 3, in all but 1 case complete	Kooi 1979, 99 figs. 94–95
5	Sleen	SLN 48/49/70/71/104	In keyhole ditch	1 complete, 4 base removed (of which 2 inverted)	Kooi 1979, 60
4	Emmen-De Wolfsbergen	EWB 2/7/8	In ring-ditch	2 complete, 2 fragmented	Kooi 1979, 103, 194
3	Buinen	BUI 111/112/113	In ring-ditch BUI 114	1 complete/inverted, 1 base removed, 1 just 2 sherds	Kooi 1979, 77
3	Buinen	BUI 108/117a/117b	In ring-ditch BUI 109	1 complete, 2 base removed	Kooi 1979, 77
3	Gasteren	GAS 35a–35c	In urn	1 inverted in urn, 2 inverted and placed on the rim of the urn	Van Giffen 1945, 110 Afb. 17
2	Sleen	SLN 142/143	In ring-ditch	1 complete, 1 base removed	Kooi 1979, 61 fig. 52, 190
2	Noordbarge	NRB 861/861a	In ring-ditch	1 complete, 1 handle removed	Kooi 1979, 49 fig. 39
2	Havelte-Koningskamp	HAV 60/60a	In urn	2 intact placed inverted on cremation in urn	Kooi 1979, 85, 87
2	Noordbarge	NRB 671b–671c	In urn	2 intact placed with cremation in urn	Kooi 1979, 87, 144
2	Havelte-Koningskamp	HAV 157a–157b	In urn	1 intact placed inverted on cremation in urn, 1 intact upright	Kooi 1979, 85, 87
2	Noordbarge	NRB 671b–671c	In pit	2 intact placed upright on top of each other	Kooi 1979, 48 fig. 38, 188
2	Noordbarge	NRB 537a–537b	Stray	1 intact, 1 base removed	Kooi 1979, 43 fig. 33, 186
2	Noordbarge	NRB 554a–554b	Stray	both base removed	Kooi 1979, 44 fig. 34, 187
2	Gasteren	GAS 56a–56b	In urn	2 intact, placement unkown	Van Giffen 1945, 103 Afb. 15
2	Gasteren	GAS 25+GAS 25a	Stray	2 intact, both placed upside down	Van Giffen 1945, 110 Afb. 19
2	Wapse	WAP 55b+55c	In urn	2 intact, placement unkown	Waterbolk 1957, 47 Tab. 1, fig. 25

Cups that cheered no more: Conclusions

We have shown that the role of 'accessory vessels' in the urnfields of the northern Netherlands was specific and guided by rule-sets that were broadly shared, but articulated locally. Whereas for single cups placed with human remains the 'simple' interpretation of personal possessions added as funerary gifts cannot be refuted, we argue that most drinking cups were intentionally left behind by mourners as part of the urnfield funerary rites (cf. Tol 2000, 108). Our arguments for this are manyfold. First and foremost, the drinking cups retrieved frequently show signs of deliberate destruction – handled cups had their handles removed, and for cups without handles their bases were frequently pierced or removed altogether. Second, the contexts in which drinking cups were retrieved (in or beyond the ditches of the funerary monuments) seems incongruent with an interpretation as personal

https://doi.org/10.2369/9783869354439.beyond-urnfields

property of the deceased. Third, the sometimes large numbers of drinking cups (no less than 14 buried at D52; Fig. 7) left in urnfields suggest that they form the residue of common – or frequently repeated – urnfield rites.

We have proposed a scenario here in which we explain these vessels as reflecting a ritual in which cups were deposited, after a 'last toast' to the deceased. In such a view, it does not matter whether the toast was made upon interment of the human remains (i.e. as part of the funerary rites *sensu stricto*) or somewhat later (i.e. as part of remembrance rites) when people returned to a grave. Cups placed with the human remains could hint at the former, cups placed in the ditches (whose soil was presumably used to create the barrow capping the human remains) might conversely advocate the latter. It is tempting to compare the removal of vessel bases to known situations where pierced-bottom vessels were used for libation (the offering of liquids; as, for example, suggested for small pots with perforated bases in the Roman Iron Age settlements at Ezinge and Englum: Nieuwhof 2015, 134, 176, 213), although the functionality of sieving has been proposed as well for pottery with perforated bases in urnfield contexts (Louwen 2021, 126).

It is however striking that several of the cups whose base had been destroyed were recovered in an inverted position (e.g. SLN 28: Kooi 1979, 57; SLN 48: Kooi 1979, 58; BUI 111: Kooi 1979, 77) or from inaccessible contexts (e.g. with the human remains; BUI 110a: Kooi 1979, 77, 191; NRB 19a: Kooi 1979, 32). Therefore, we would argue that the main purpose of the observed fragmentation – and/or inverted placement – was to (visually, socially) signify that these cups should never be used again. One could envision a rite in which kin and friends of the deceased gathered round the grave and enjoyed a final drink in the deceased's presence, with the finality of that act materialised and emphasised through the destruction, inversion and interment of cups thus rendered *taboo*.

In some cases, sherds of the serving vessel – possibly containing an (alcoholic?) beverage – may have been destroyed and left behind as well (e.g. NRB 486/494; NBR 942; D52 6; Kooi 1979, 42 fig. 32, 50 fig. 40, 97 fig. 92). Whilst we have argued that decommissioning was the prime motivation behind fragmentation, it may have served different purposes at the same instance. In addition to the act of destruction, fragmentation also enables the mourners to retain pottery sherds. This phenomenon is described as enchainment (Chapman 2000, 5). Because mourners retain part of an object of the deceased, they remain or even become connected to the deceased. In addition to this, multiple mourners can as well become connected by the fragments they retain, because they were all participants of the same funeral. Ample examples that indicate retention can be found within the dataset. In some cases, the majority of fragments of cups rendered defunct were not deposited. The most extreme example for this is the deposition of only the handle of a cup at Wapse (WAP 72g: Waterbolk 1957, 48 table 1, fig. 26). Other examples of retention can be found as well (e.g. NRB 547; SLN 127; BUI 112; Kooi 1979, 43 fig. 33, 60 fig. 51, 77 fig. 70).

The practice of (deliberate) fragmentation and retention is much wider attested in the Netherlands. More than 20 % of the graves that Louwen incorporated into his work contained pottery sherds that were neither part of the urn nor of an accessory vessel (Louwen 2021, 150–151). In rare instances, these fragments can be refitted with sherds from other contexts within the urnfield (Louwen 2021, 171, no. 112). In these instances, the connection between two graves seems to have been highlighted. In addition to its widespread occurrence, (deliberate) fragmentation is also not confined to funerary contexts alone. In contemporary Iron Age settlements, structured or ritual deposits of incomplete objects are frequently found (Van den Broeke 2002; 2015; Gerritsen 2003, 63–66, 79–95, 96–102; De Vries 2016; 2021, 137–190, 193–220). Other researchers have also linked the urnfield ritual to special deposition practices in settlement contexts and even suggested that the missing parts of incompletely deposited vessels should be sought in funerary contexts (Van den Broeke 2015, 92–93). Based on this research, it could also have been *vice-versa* where incomplete pottery in settlement contexts are the fragments brought home after a funeral.

https://doi.org/10.2369/9783869354439.beyond-urnfields

We have argued that the deposition of (destroyed) drinking cups as part of, or after, funerary rites was a structural element for urnfields in the northern Netherlands. At sites like Havelte, Noordbarge and Sleen, the number of drinking cups recovered in various ways and contexts amounts to *c.* 20–35 % of the number of graves uncovered. Yet, the popularity of this funerary tradition in the northern Netherlands should not be confused with exclusivity. In the adjacent central and eastern Netherlands regions, urnfields with ample accessory vessels deposited in similar ways are known (cf. Verlinde 1985, 244, 255, 259 for cups in ditches of long-bed barrows). At Marienberg, an accessory cup was placed inverted at the bottom of a pit (Verlinde 1987, 121; Louwen 2021, 85), and at Ederheide five Late Bronze Age drinking cups were placed together in a pit (Verlinde/Hulst 2010, 54). The absence of bases for accessory cups is documented for the Veluwe area (Verlinde/Hulst 2010, 177 Afb. 73 G42, 178 Afb. 64 G53, 188 Afb. 74 G143, G146, G147) but never addressed systematically.

For the southern Netherlands, indications of similar rites involving drinking cups may be assumed as well. For example, at Weert-Boshoverheide, 14 pots were deposited in the ditch of longbed-barrow C7 (Roymans/Kortlang 1999, 45 note 27). Drinking cups placed in ring-ditches were also noted for this site (Hissel/Theunissen 2012, 47). Moreover, like at Noordbarge and Buinen, sherds from specific pots were distributed across (opposites) of ditches of longbed-barrows and ring-ditches (Hissel 2012, 126). At Mierlo-Hout, a bowl was fragmented and its sherds were scattered in the ring-ditch (Tol 1999, 99, 100 tab. 2). In the southern Netherlands, *Henkeltassen* also occur in ditches (e.g. Verwers 1975, 26, 29 fig. 5, 30 fig. 6), and Verwers (1975, 28) remarks that in ditches mostly fragments of small cups and bowls are recovered.

To the east of our study area, in Germany, similar practices can be observed as well. In Telgte, 27 deposits with sherds were encountered in the urnfield (Wilhelmi 1981, 79–89). In a similar vein to the examples discussed here, vessels were found in the ditches of the funerary monuments and *Henkeltassen* were deposited in various states – complete, fragmented, with or without the handle. Occasionally, only the handle was deposited (e.g. F.35a: Wilhelmi 1981, Tafel 6). Again, the deposition of *Henkeltassen* cannot always be directly associated with the burial of the urn proper. In the case of keyhole-shaped grave VII, a handled cup was placed upside down in the ditch of the vestibule (German: *Vorhof*) at the furthest point facing the central grave (Wilhelmi 1981, Beilage 2, Tafel 39.1). The urnfield of Lengerich-Wechte rendered multiple examples of cups, sometimes stacked and positioned upside down in the urn (F3; Wilhelmi 1976, Tafel 10), sometimes placed sideways next to the urn (ibid., *Anlage* XXXIII; Wilhelmi 1976, Tafel 21,1).

Whilst anecdotal, these observations suggest that the decommissioning of drinking cups was also undertaken by communities beyond the northern Netherlands. For some regions, however, drinking cups seem to be generally placed with the cremated remains (rather than in ditches) and the removal of vessel bases appears less common. For other regions, however, stronger parallels with the northern Netherlands are evident. The fact that such patterns have not been studied so systematically as done here for the northern Netherlands, hampers the interregional comparison. We can only hope this paper may serve as a springboard for complementary ones for other regions.

For the northern Netherlands' urnfields, we can validly argue that – after the placing of human remains in or amidst funerary monuments – the destruction and deposition of drinking cups in and around the ditches of such monuments was the second most common (archaeologically visible) funerary rite. The deliberate treatment (decommissioning by fire and removal of vessel bases and handles) and placement (inverted, under urns, in groups) of such drinking cups suggest a part of the funerary traditions in which the cups – as material extensions of those that drank from them – required a proper final send-off as well. Akin to their former users, they were to cheer no more.

https://doi.org/10.2369/9783869354439.beyond-urnfields

Bibliography

Arnoldussen/Albers 2015: S. Arnoldussen/P. C. H. Albers, When urnfields lose their meaning… The case of Iron Age habitation amidst the Noordbarge urnfield. In: E. A. G. Ball/S. Arnoldussen (eds.), Metaaltijden 2. Bijdragen in de studie van de metaaltijden (Leiden 2015) 149–169.

Arnoldussen/Scheele 2012: S. Arnoldussen/E. E. Scheele, The ancestors nearby. The domestic and funerary landscape of Angelslo-Emmerhout. In: H. D. van der Velde/N. L. Jaspers/E. Drenth/H. B. G. Scholte Lubberink (eds.), Van graven in de prehistorie en dingen die voorbij gaan. Studies aangeboden aan Eric Lohof ter gelegenheid van zijn pensionering in de archeologie (Leiden 2012) 153–185.

Bérenger 2008: D. Bérenger, Bis nach Nordosten: Grabanlagen der Emsgruppe an der Mittelweser. In: D. Bérenger/C. Grünewald (eds.), Westfalen in der Bronzezeit (Münster 2008) 42.

Brink-Kloke et al. 2006: H. Brink-Kloke/H. Heinrich/U. Bartelt, Das Schlüsselloch-Gräberfeld am Oespeler Bach. Bodenaltertümer Westfalens 43 (Mainz 2006).

Van den Broeke 2002: P. W. Van den Broeke, Een vurig afscheid? Aanwijzingen voor verlatingsrituelen in ijzertijdnederzettingen. In: H. Fokkens/R. Jansen (eds.), 2000 jaar bewoningsdynamiek. Brons- en ijzertijdbewoning in het Maas-Demer-Scheldegebied (Leiden 2002) 45–61.

Van den Broeke 2005: P. W. Van den Broeke, Late Bronze Age and Iron Age: introduction. In: L. P. Louwe Kooijmans/P. W. van den Broeke/H. Fokkens/A. L. van Gijn (eds.), The Prehistory of the Netherlands II (Amsterdam 2005) 477–489.

Van den Broeke 2015: P. W. Van den Broeke, Het verlatingsritueel: een poging tot reconstructie. In: E. A. G. Ball/S. Arnoldussen (eds.), Metaaltijden 2. Bijdragen in de studie van de metaaltijden (Leiden 2015) 93–100.

Butler 1965: J. J. Butler, Ook eens iets voor dames. Nieuwe Drentse Volksalmanak 83, 1965, 163–198.

Chapman 2000: J. Chapman, Fragmentation in archaeology. People, places and broken objects in the prehistory of south-eastern Europe (London 2000).

Fokkens 1997: H. Fokkens, The genesis of urnfields: economic crisis or ideological change? Antiquity 71, 1997, 360–373.

Fontijn 1996: D. Fontijn, Socializing landscape. Second thoughts about the cultural biography of urnfields. Archaeological Dialogues 3, 1996, 77–87.

Gerritsen 2003: F. Gerritsen, Local identities. Landscape and community in the late prehistoric Meuse-Demer-Scheldt region. Amsterdam Archaeological Studies 9 (Amsterdam 2003).

Van Giffen 1936: A. E. Van Giffen, De tweeënbarg en het kringgrepurnenveld op de Oeren te Wapse, gem. Diever. Nieuwe Drentse Volksalmanak 54, 1936, 2–20.

Van Giffen 1941: A. E. Van Giffen, Kringgrepurnenveld in het zgn Overdijksveld onder Gasteren, gem. Anloo. Nieuwe Drentse Volksalmanak 59, 1941, 103–106.

Van Giffen 1943: A. E. Van Giffen, Oudheidkundige aanteekeningen over Drentsche vondsten X: Een urnenveld te Drouwen. Nieuwe Drentse Volksalmanak 61, 1943, 93–139.

Van Giffen 1945: A. E. Van Giffen, Het kringgrepurnenveld en de grafheuvels O.Z.O. van Gasteren, gem. Anloo. Nieuwe Drentse Volksalmanak 63, 1945, 69–134.

Guerra-Doce 2014: E. Guerra-Doce, The Origins of Inebriation: Archaeological Evidence of the Consumption of Fermented Beverages and Drugs in Prehistoric Eurasia. Journal of Archaeological Method and Theory 22(3), 2014, 751–782.

Hessing/Kooi 2005: W. A. M. Hessing/P. B. Kooi, Urnfields and cinerary barrows: funerary and burial ritual in the Late Bronze and Iron Ages. In: L.P. Louwe Kooijmans/P.W. van den Broeke/H. Fokkens/A. L. van Gijn (eds.), The Prehistory of the Netherlands II (Amsterdam 2005) 631–654.

Hissel 2012: M. E. Hissel, Het grafveld van de Boshoverheide, een nieuwe stand van zaken. In: M. E. Hissel/E. M. Theunissen/C. A. M. van Rooijen/W. J. B. Derickx (eds.), Cold case in het stuifzand; het urnenveld van de Boshoverheide bij Weert ontsloten. Rapportage Archeologische Monumentenzorg 209 (Amersfoort 2012) 95–148.

Hissel/Theunissen 2012: M. E. Hissel/E. M. Theunissen, Geschiedenis van het archeologische onderzoek. In: M. E. Hissel/E. M. Theunissen/C. A. M. van Rooijen/W. J. B. Derickx (eds.), Cold case in het stuifzand; het urnenveld van de Boshoverheide bij Weert ontsloten. Rapportage Archeologische Monumentenzorg 209 (Amersfoort 2012) 41–72.

Hoffman 2012: K. P. Hoffman, Der Identität ihr Grab? Zur Identitätsforschung anhand bronzezeitlicher Bestattungen des Elbe-Weser-Dreiecks. In: I. Heske/B. Horjes (eds.), Bronzezeitliche Identitäten und Objekte. Beiträge aus den Sitzungen der AG Bronzezeit auf der 80. Tagung des Süd- und Westdeutschen Verbandes für Altertumsforschung in Nürnberg 2010 und dem 7. Deutschen Archäologiekongress in Bremen 2011. Universitätsforschungen zur Prähistorischen Archäologie 221 (Bonn 2012) 13–25.

Kersten 1948: W. Kersten, Die Niederrheinische Grabhügelkultur. Bonner Jahrbücher 148, 1948, 5–81.

Kooi 1979: P. B. Kooi, Pre-Roman urnfields in the north of the Netherlands (Groningen 1979).

Louwen 2021: A. Louwen, Breaking and making the ancestors. Piecing together the urnfield mortuary process in the Lower-Rhine-Basin, ca. 1300–400 BC (Leiden 2021).

Modderman/Louwe Kooijmans 1966: P. J. R. Modderman/L. P. Louwe Kooijmans, The Heibloem, a cemetery from the Late Bronze Age and Early Iron Age between Veldhoven and Steensel, prov. Noord-Brabant. Analecta Praehistorica Leidensia 2, 1966, 9–26.

Mötsch et al. 2019: A. Mötsch/M. Rageot/B. Schorer, Organic residues in pottery vessels from selected archaeological features of the Heuneburg. First results of a case study. In: Ph. W. Stockhammer/J. Fries-Knoblach

https://doi.org/10.2369/9783869354439.beyond-urnfields

(eds.), Was tranken die frühen Kelten? Bedeutungen und Funktionen mediterraner Importe im früheisenzeitlichen Mitteleuropa. Internationale Konferenz, Kloster Weltenburg, 28.04.–01.05.2017. BEFIM 1 (Leiden 2019) 61–76.

De Mulder et al. 2003: E. F. J. De Mulder/M. C. Geluk/I. L. Ritsema/W. E. Westerhoff/T. E. Wong, De ondergrond van Nederland (Groningen 2003).

Nieuwhof 2015: A. Nieuwhof, Eight human skulls in a dung heap and more. Ritual practice in the terp region of the northern Netherlands, 600 BC – AD 300 (Eelde 2015).

Rageot et al. 2019: M. Rageot/A. Mötsch/B. Schorer/D. Bardel/A. Winkler/F. Sacchetti/B. Chaume/Ph. Della Casa/S. Buckley/S. Cafisso/J. Fries-Knoblach/D. Krausse/T. Hoppe/Ph. W. Stockhammer/C. Spiteri, New insights into Early Celtic consumption practices: Organic residue analyses of local and imported pottery from Vix-Mont Lassois. PLoS ONE 14.6, 2019. https://doi.org/10.1371/journal.pone.0218001.

Roymans/Kortlang 1999: N. G. A. M. Roymans/F. P. Kortlang, Urnfield symbolism, ancestors and the land in the Lower Rhine region. In: F. Theuws/N. G. A. M. Roymans (eds.), Land and Ancestors. Cultural dynamics in the Urnfield period and the Middle Ages in the Southern Netherlands. Amsterdam Archaeological Studies 4 (Amsterdam 1999) 33–61.

Rüschoff-Thale 2004: B. Rüschoff-Thale, Die Toten von Neuwarendorf in Westfalen. 341 Gräber vom Endneolithikum bis in die Spätlatènezeit Bodenaltertümer Westfalens (Mainz 2004).

Scheele 2016: E. E. Scheele, The Wapse urnfield revisited: the search for groups of urnfield users (prov. Drenthe, The Netherlands). Lunula Archaeologia Protohistorica XXIV, 2016, 81–90.

Stika 2011: H. S. Stika, Early Iron Age and Late Mediaeval malt finds from Germany – attempts at reconstruction of early Celtic brewing and the taste of Celtic beer. Archaeological and anthropological sciences 3(1), 2011, 41–48.

Tol 1999: A. Tol, Urnfield and settlement traces from the Iron Age at Mierlo-Hout. In: N. Roymans/F. Theuws (eds.), Land and Ancestors. Cultural dynamics in the Urnfield period and the Middle Ages in the Southern Netherlands. Amsterdam Archaeological Studies (Amsterdam 1999) 87–132.

Verlinde 1985: A. D. Verlinde, Die Gräber und Grabfunde der späten Bronzezeit und frühen Eisenzeit in Overijssel IV. Berichten van de Rijksdienst voor het Oudheidkundig Bodemonderzoek 35, 1985, 231–411.

Verlinde 1987: A. D. Verlinde, Die Gräber und Grabfunde der späten Bronzezeit und frühen Eisenzeit in Overijssel (Leiden 1987).

Verlinde/Hulst 2010: A. D. Verlinde/R. S. Hulst, De grafvelden en grafvondsten op en rond de Veluwe van de Late Bronstijd tot in de Midden-Ijzertijd. Nederlandse Archeologische Rapporten 39 (Amersfoort 2010).

De Vries 2016: K. M. De Vries, Together apart. Iron Age deposition practice on the Fries-Drents plateau. In: A. Müller/R. Jansen (eds.), Metaaltijden 3. Bijdragen in de studie van de Metaaltijden (Leiden 2016), 97–108.

De Vries 2021: K. M. De Vries, Settling with the norm? Norm and variation in social groups and their material manifestations in (Roman) Iron Age (800 BC–AD 300) settlement sites of the northern Netherlands (Leiden 2021).

Verwers 1975: G. J. Verwers, Urnenveld en nederzetting te Laag-Spul, gem. Hilvarenbeek. Analecta Praehistorica Leidensia 8, 1975, 23–43.

Waterbolk 1957: H. T. Waterbolk, Een kringgrepurnenveld te Wapse. Nieuwe Drentse Volksalmanak 75, 1957, 42–67.

Waterbolk 1962: H. T. Waterbolk, Hauptzüge der eisenzeitlichen Besiedlung der nördlichen Niederlande. Offa 19, 1962, 9–46.

Wilbertz 2009: O. M. Wilbertz, Langgräben und Schlüssellochgräben der jüngeren Bronze- und frühen Eisenzeit zwischen Aller und Dordogne. Materialhefte zur Ur- und Frühgeschichte Niedersachsens 38 (Rahden 2009).

Wilhelmi 1976: K. Wilhelmi, Der Kreisengraben- und Brandgräberfriedhof Lengericht-Wechte (Kreis Steinfurt) 1970–1973. Bodenaltertümer Westfalens 15 (Münster 1976).

Wilhelmi 1981: K. Wilhelmi, Zwei bronzezeitliche Kreisgrabenfriedhöfe bei Telgte, Kreis Warendorf. Bodenaltertümer Westfalens 17 (Münster 1981).

Willems 1935: W. J. A. Willems, Een bijdrage tot de kennis der voor-romeinsche urnenvelden in Nederland (Maastricht 1935).

Stijn Arnoldussen (corresponding author)
Groningen University
Groningen Institute for Archaeology
Groningen
The Netherlands
s.arnoldussen@rug.nl

Karen M. de Vries
ADC ArcheoProjecten
Amersfoort
The Netherlands
k.devries@archeologie.nl

https://doi.org/10.2369/9783869354439.beyond-urnfields

Unravelling the mysteries hidden within the cremated human remains from Belgium – The interdisciplinary CRUMBEL project

Christophe Snoeck, Giacomo Capuzzo, Barbara Veselka, Kevin Salesse, Ioannis Kontopoulos, Rica Annaert, Sarah Dalle, Marta Hlad, Charlotte Sabaux, Amanda Sengeløv, Elisavet Stamataki, Mathieu Boudin, Eugène Warmenbol, Martine Vercauteren and Guy De Mulder

Keywords: CRUMBEL project, cremation burial, cremated remains, Belgium

*Abstract: The CRUMBEL project stands for **CR**emation, **U**rns and **M**obility – Population dynamics in **BEL**gium, and focusses on the study of cremated human remains from Belgium dating from the Neolithic to the Early Middle Ages. It combines radiocarbon dating, infrared, elemental and isotope analyses, osteology, and experimental cremations to gain new insights into diet, mobility, landscape use, funerary practices, health and demography of past Belgian populations who practiced cremation. The initial results of the CRUMBEL project highlight clear differences in diet, mobility and funerary practices for example between the Scheldt and the Meuse basins in the Metal Ages, as well as a clear increase in salt-rich foods during the Roman Period compared to the periods before and after. The unique interdisciplinary and diachronic approach of the CRUMBEL project has shown how contrasting different methodologies with archaeological and historical evidence can help uncover new information about past populations that practiced cremation.*

Introduction

Cremated human remains are often encountered in archaeological excavations in Belgium, especially from the Metal Ages and the Roman Period where they represent the majority of the human remains found in funerary contexts (Capuzzo et al. 2020; 2023). Unfortunately, they have received too little attention leaving many blank pages in our understanding of the Belgian past, especially concerning periods where cremation was the dominant funerary practice. The last two decades, however, have seen a drastic increase in the number of studies focussing on cremation rituals and cremated human remains. New methodological developments have among other things focussed on radiocarbon dating (Lanting/Brindley 1998; Lanting et al. 2001), isotope and infrared analyses (e.g. Snoeck et al. 2014; 2016; Thompson et al. 2009), age and sex assessments (Gonçalves et al. 2011; 2013; Cavazzuti et al. 2019). Although some recently excavated cremation sites had been radiocarbon dated, this had, however, not been applied to the older extensive collections of cremated human remains from Belgium (De Mulder et al. 2007; 2017; De Reu et al. 2012; De Mulder/Bourgeois 2014).

The CRUMBEL project, which stands for **CR**emation, **U**rns and **M**obility – Population dynamics in **BEL**gium, aims to remedy this situation by focussing on applying these tools (osteology, isotope and infrared analyses, radiocarbon dating, etc.) to Belgian cremated human remains dating from the

https://doi.org/10.2369/9783869354439.beyond-urnfields

Neolithic to the Early Middle Ages when the practice of cremation almost completely disappears (Capuzzo et al. 2020). This diachronic approach offers a unique opportunity to not only investigate geographical trends (e.g. differences between the two major river basins crossing Belgium: the Meuse and the Scheldt) but also key transitions such as the transition from the Iron Age to the Roman Period and its impacts on the life and death of those living in Belgium during this period (e.g. Dalle et al. 2022; 2023a). In parallel, new tools are being developed and experimental cremations are carried out to increase the amount of information that can be extracted from cremated human remains. This approach and the new developments carried out in the CRUMBEL project open the possibility to gather more information about any archaeological sites where cremations are found.

Cremations in Belgium

The first cremation burial found in Belgium dates to the Mesolithic period and comes from the Early Mesolithic rock shelter of Abri des Autours (OxA-5838, 9090 ± 140 BP; Polet/Cauwe 2007). Cremation occurs only sporadically in the Mesolithic period as inhumation remains the major funerary practice. A similar situation is observed in the Neolithic where only few cremation burials have been recovered, such as in Kruishoutem-Wijkhuis, Oud-Turnhout Hueve Akkers, and Ranst-Zevenbergen (De Laet/Rogge 1972; Van Liefferinge 2009; Sergant et al. 2009; Delaruelle et al. 2012). The dating campaign of the CRUMBEL project with more than 500 new radiocarbon dates obtained directly on calcined human remains (De Mulder et al. 2020; 2021a; Draily et al. 2021; Sabaux et al. 2021; Meylemans et al. 2022; Capuzzo et al. 2023; Dalle et al. 2023a) highlighted a new Middle Neolithic cremation burial from the site of Meerdaalwoud at Hamme-Mille (Beauvechain), successfully demonstrating it to be the oldest Neolithic cremation grave found in Belgium (Capuzzo et al. 2023). Still, the number of cremations dated to the Neolithic period remains very low. Following a period of decrease in both inhumation and settlement evidence around the 4.2k BP event (Fig. 1A), cremation appears and becomes the main burial type in Belgium from the Middle Bronze Age onwards (Capuzzo et al. 2020; 2023). Several different types of cremation deposits are found ranging from classical urn graves to bones scattered in a pit in association with pyre remains (De Mulder 2014). Another decrease is visible around 3.2k BP after which burials with cremated bones scattered in a pit become less common while other types of cremation burials, especially urns, dominate (Fig. 1B). This change corresponds to the abandonment of barrows as funerary monuments in favour of cremation deposits in flat graves from 1200 BC onwards, following the urnfield tradition (De Mulder 2020; Capuzzo et al. 2023). Whether these two decreases in burials around the 4.2k and 3.2k events are linked to changes in the environmental and climatic conditions requires further investigation. After 500 BC the urnfields decline and smaller cremation cemeteries appear. In the Roman period, cremation continues to dominate in Belgium as well as in the Early Middle Ages when, around the 7th century, it seems to completely disappear, and inhumation becomes the sole funerary ritual from the 8th century onwards (Capuzzo et al. 2020).

Palaeodemography

Due to the high fragmentation of cremated human remains it is often difficult to assess their age and biological sex, as well as identify potential pathologies. Furthermore, the presence of the remains of more than one individual with a single cremation deposit is difficult to detect. It is often the case that only 20 % or even less of the cremated individuals can actually be sexed (e.g. Holck 1986; Veselka/Lemmers 2014), while for ageing, individuals can often only be placed in broad categories such as adult

https://doi.org/10.2369/9783869354439.beyond-urnfields

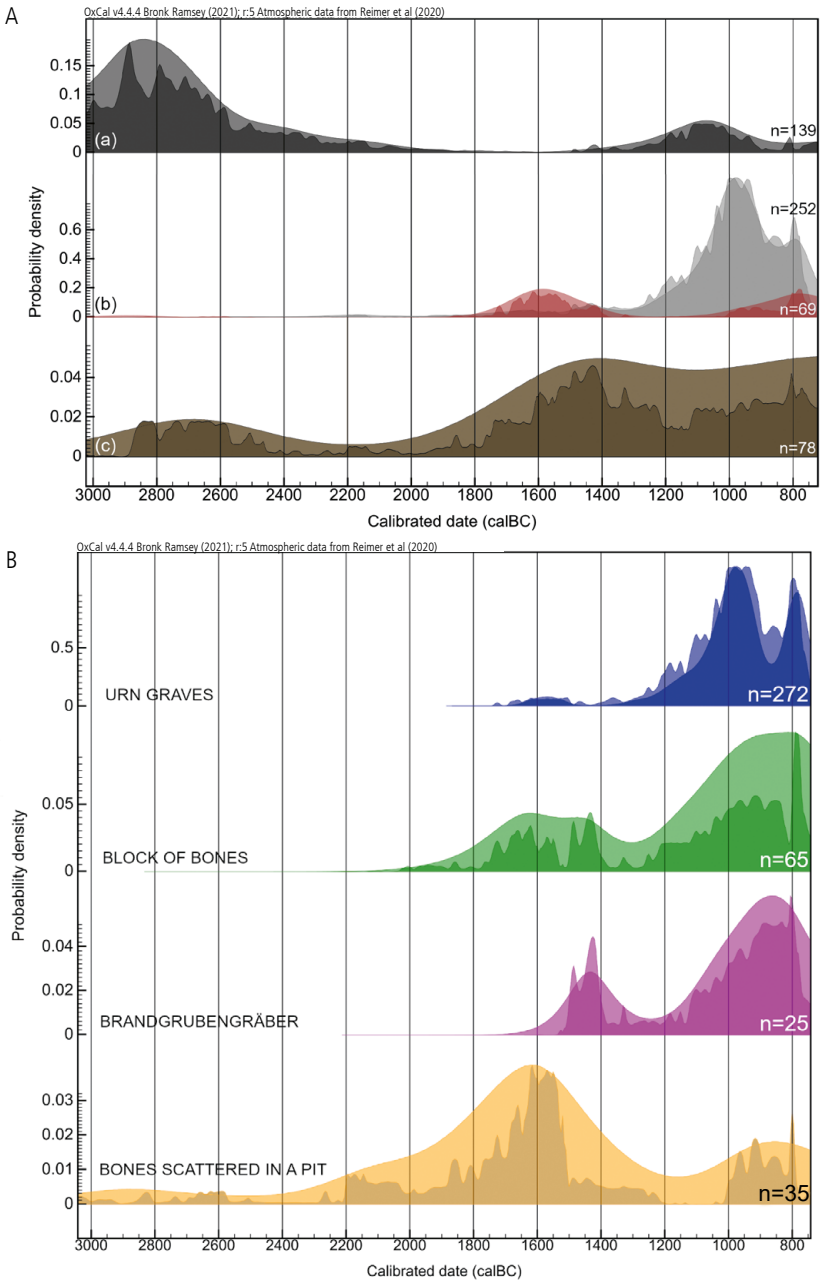


*Fig. 1. A: Summed Calibrated Probability Distributions (SCPDs, dark colours) and posterior Kernel Density Estimates (KDE) models (light colours) describing the temporal diffusion of (a) inhumation and (b) cremation burials in Belgium as well as (c) settlements in Flanders; B: SCPDs and posterior KDE models which describe the temporal diffusion of the following cremation grave types: urn graves, block of bones (*Knochenlager*), deposits with cremated bone and remains of the pyre (*Brandgrubengräber*), and bones scattered in a pit, in Belgium between the Final Neolithic and the Iron Age transition (modified after* Capuzzo *et al. 2023).*

and non-adult, based on the major differences in size and robusticity between adult and non-adult bones. These broad categories and the limited number of individuals for which a biological sex could be obtained as well as the complexity to identify pathologies such as vitamin D deficiency, limit the type of information that can be obtained from cremated human remains. To this end, the CRUMBEL project developed new methods to 1) increase the number of individuals that can be sexed, 2) refine the broad

https://doi.org/10.2369/9783869354439.beyond-urnfields

age categories usually used for cremated human remains, 3) help detect vitamin D deficiency in cremated individuals, and 4) identify with more precision the number of individuals present in a cremation deposit.

Over the last decades, different methods were developed to improve the identification of the biological sex of cremated individuals, such as the assessment of the lateral angle of the internal acoustic meatus (Gonçalves et al. 2011; Masotti et al. 2013), metric analyses of teeth (Gouveia et al. 2017; Godinho et al. 2019) and bones (Wahl 1996; Gonçalves et al. 2013; Cavazzuti et al. 2019). In order to increase the number of correctly sexed cremated individuals from archaeological and forensic contexts, the sexual dimorphism of 22 commonly used and new skeletal elements was evaluated in 86 individuals from the William M. Bass donated cremated collection of know sex and age-at-death (Forensic Anthropology Center of Tennessee University in Knoxville, United States). The results were analysed using different predictive models to assess the classification accuracy (CA) of the different skeletal elements and combinations thereof (Hlad et al. 2021). From the 22 skeletal elements investigated for sexual dimorphism, 12 presented an overall CA ≥80 %, e.g. humerus trochlea maximum diameter (Fig. 2a), lunate length, humerus head vertical diameter, humerus head transverse diameter, radius head maximum diameter (Fig. 2b), femur head vertical diameter, patella width, patella thickness, and talus trochlea length. An even better CA (≥95 %) was obtained using multivariate analyses of a combination of elements (e.g. humerus trochlea max. and patella thickness). While future research is still needed, the results obtained using machine learning approaches show how sexual dimorphism is well preserved in several skeletal elements even after calcination and can help increase the biological sexing rates of burnt individuals (Hlad et al. 2021).

The same William M. Bass donated cremated collection was also used to refine the age categories usually used for ageing adult burnt individuals (Veselka et al. 2021a). In non-adult cremated remains, age is usually based on dental development and eruption (Moorrees et al. 1963; Demirjian et al. 1973; Liversidge et al. 1998) and stages of epiphyseal fusion (Black/Scheuer 1996). For adults, age determinations are usually based on different macroscopic observation such as modifications of the pubic symphysis (Brooks/Suchey 1990), sternal rib ends (Işcan et al. 1984; 1985), or the auricular surface (Buckberry/Chamberlain 2002). These assessments do, however, lead to rather broad categories, especially for older individuals (46+ years; Falys/Lewis 2011), which are even broader in cremated individuals (Silva 2015; Ulguim 2015; Veselka/Lemmers 2014). Fortunately, Falys/Prangle (2015) designed a method to assess the age of older individuals and classify them in narrower categories based on changes to the sternal clavicle end. The Falys–Prangle method has been applied to the 86 individuals from the William M. Bass collection and this showed that the method can be applied to cremated individuals also (Fig. 3), allowing to better assess the age of cremated individuals with a preserved sternal clavicle end (Veselka et al. 2021a).

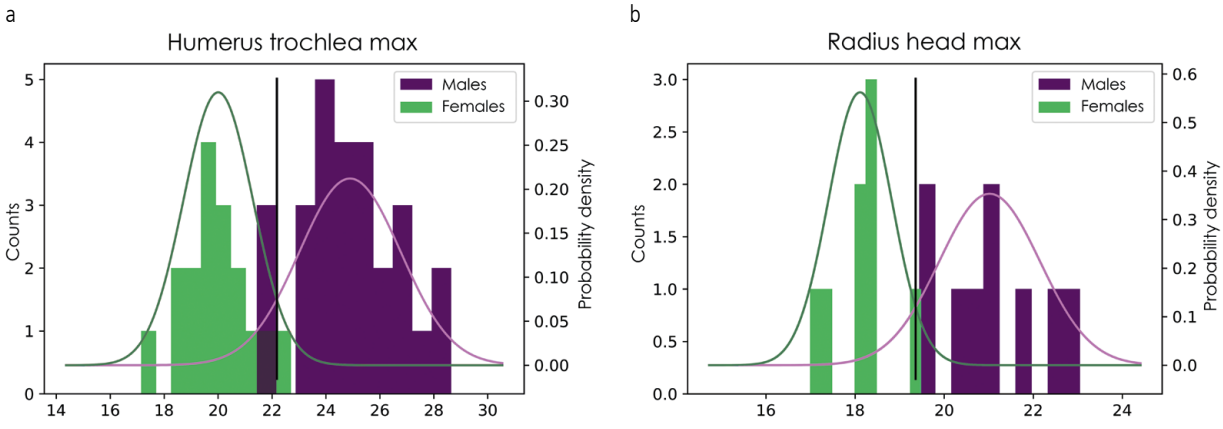


Fig. 2. Female and male data for two traits (a: humerus trochlea maximum diameter; b: radius head maximum diameter) with the calculated cut-off point represented by the black line parallel to the y-axis. The x-axis represents the measurements in mm (after Hlad et al. 2021).

https://doi.org/10.2369/9783869354439.beyond-urnfields

Within the CRUMBEL project, several cremation experiments were undertaken, including the assessment of vitamin D deficiency in burnt teeth (Veselka/Snoeck 2021). Traditionally, vitamin D deficiency was considered to be one of the consequences of the Industrial Revolution, resulting from air pollution, tall narrow buildings blocking the sun, and working long hours inside (Veselka et al. 2015; 2018; 2019; 2021c). However, several researchers demonstrated the cause for vitamin D deficiency to be more complex and to have been prevalent throughout the ages (e.g. Mays/Brickley 2018; Lockau et al. 2019; Veselka et al. 2021b). Unfortunately, until the study by Veselka/Snoeck (2021), it was not possible to identify vitamin D deficiency in cremated human remains, leaving out a significant portion of human remains contexts. For this experimental study 17 paired teeth were used (Veselka/Snoeck 2021). One of each set was analysed microscopically for the presence of interglobular dentine (IGD), a dental mineralisation defect attributed to vitamin D deficiency (D'Ortenzio et al. 2016). The antimeres were burned at different temperatures, ranging from 400 °C to 900 °C, in a muffle furnace. This way, the visibility of IGD in burnt teeth could be assessed (Fig. 4). Observations of unburned and burned teeth were compared and the remarkable finding

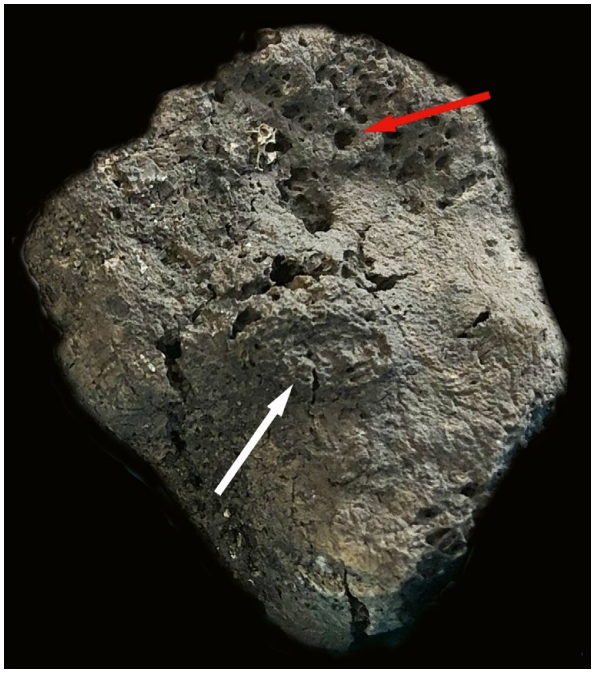


Fig. 3. New age-estimation method using sternal clavicle end morphology as developed by Falys/Prangle (2015). Note the undulation (white arrow) and the microporosity (red arrow) which would result in an age range of 62 to 83 years (after Veselka et al. 2021a).

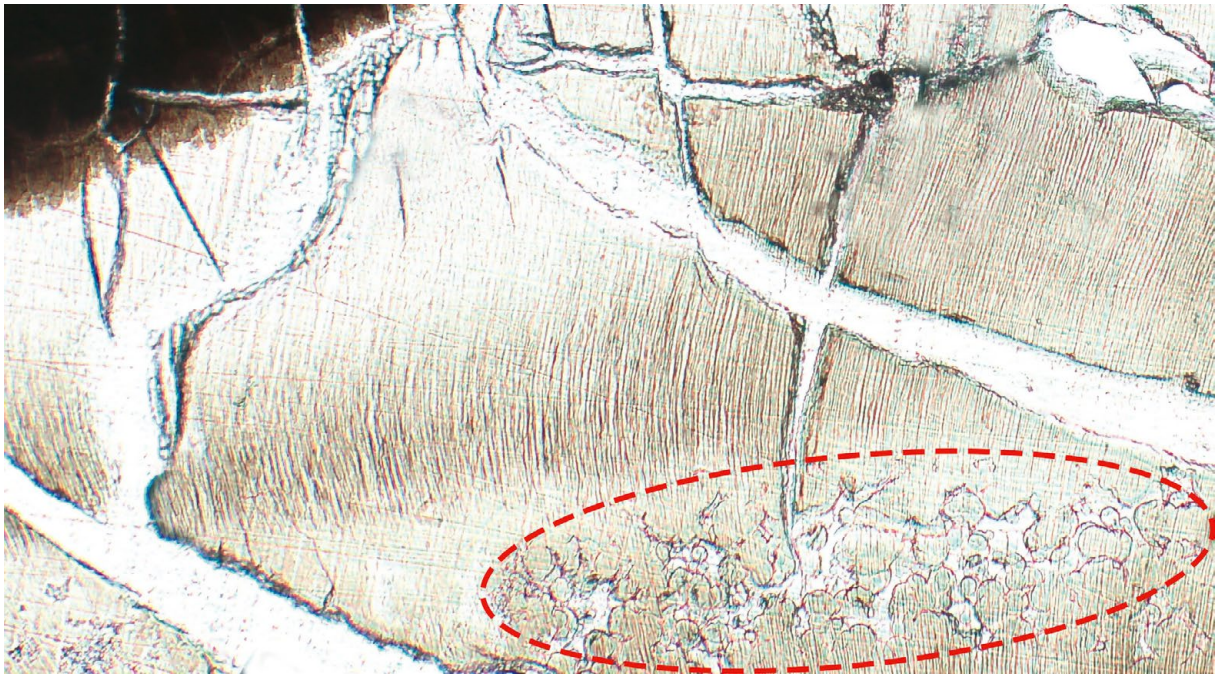


Fig. 4. Interglobular dentine in a permanent right mandibular molar after burning at 600°C for 2 hours (red oval). Dentine is light brown and striped, enamel is dark brown (upper left corner). Note the heath induced cracks. Magnification 40x (photo B. Veselka).

https://doi.org/10.2369/9783869354439.beyond-urnfields

was that IGD was indeed still visible in teeth that were burned at temperatures as high as 900 °C. It is the first time vitamin D deficiency has been observed in cremated remains; this represents a huge step forward in the field of palaeopathology. Usually, it is very difficult to observe pathological anomalies in cremated remains, let alone vitamin D deficiency which is generally identified macroscopically based on bending deformities of the long bones, which is impossible to do in cremated remains. By demonstrating IGD to still be visible in calcined teeth, vitamin D deficiency finally can also be identified in cremated human remains.

Osteological analyses provide crucial information about age and biological sex of cremated individuals as well as information about pathologies. They can also help assess the minimum number of individuals (MNI) present in a cremation deposit. However, due to the high level of fragmentation and absence of identical skeletal elements, this assessment often underestimates the number of individuals present in a cremation deposit. The combination of osteological analyses with radiocarbon dating and strontium isotope analyses provides a new tool for improving the MNI assessment. A pilot study on the cremation deposits of the Bronze and Iron Ages cremation cemetery of Herstal, Belgium, demonstrated two cases of a cremation grave containing one additional individual that had not been identified osteologically (Sabaux et al. 2021). Some of these individuals had radiocarbon dates up to one century apart (Fig. 5). This has important consequences as it implies that cremation rituals might be more complex than initially thought. Furthermore, it highlights the importance of carrying out all analytical measurements (radiocarbon dating, isotope, and infrared analyses, etc.) on the same bone fragments (Sabaux et al. submitted).

Diet and mobility

During the cremation process, the temperature can reach 1000 °C and more. This leads to the destruction of all the organic matter, including collagen (Snoeck et al. 2014), which is usually used to reconstruct the diet of past population through carbon and nitrogen isotope ratios. Furthermore, the inorganic fraction, commonly called bioapatite, is heavily altered and its carbon and oxygen isotope ratios are modified and cannot be used for palaeodietary or palaeomobility analyses. Instead, they can inform on funerary practices such as pyre size or temperature (Snoeck et al. 2016; Salesse et al. 2021; Stamataki et al. 2021). Fortunately, strontium concentrations ([Sr]) and isotope ratios ($^{87}Sr/^{86}Sr$) remain unaltered during and after cremation (Harbeck et al. 2011; Snoeck et al. 2015; Dalle et al. 2022), opening the possibility to investigate mobility and landscape use of past populations that practiced cremation (Snoeck et al. 2022).

The CRUMBEL project took advantage of this new methodological development and applied it on cremated human remains from Belgium and surrounding areas using a diachronic approach from the Neolithic to the Early Middle Ages. Site-specific studies highlighted the importance of contrasting the strontium isotope ratios with a well characterised baseline of the biologically available strontium (BASr). For example, the early medieval cemetery of Echt in the Netherlands showed a wide range in $^{87}Sr/^{86}Sr$ going from 0.7096 to 0.7139 (Veselka et al. 2021c). A similar wide range was observed in the Metal Ages site of Herstal, Belgium, located only 50 km south of Echt (0.7109–0.7138; Sabaux et al. 2021). The initial results thus suggested a high degree of mobility, but when comparing these ranges to the ranges of values seen in the environment (BASr), it becomes clear that all these $^{87}Sr/^{86}Sr$ can be found within a few kilometers from each site. Indeed, modern plants samples collected in the vicinity of the sites returned values going from 0.7088 to 0.7141 (Fig. 6; Veselka et al. 2021c), demonstrating that rather than mobility, $^{87}Sr/^{86}Sr$ show that those buried in these cemeteries were using different parts of the landscape around the sites.

At both urnfields of Velzeke, Belgium, the cremated remains show a local population was buried there. It is only during the final phase of the Late Bronze Age (9th century BC) and the Early Iron Age

https://doi.org/10.2369/9783869354439.beyond-urnfields

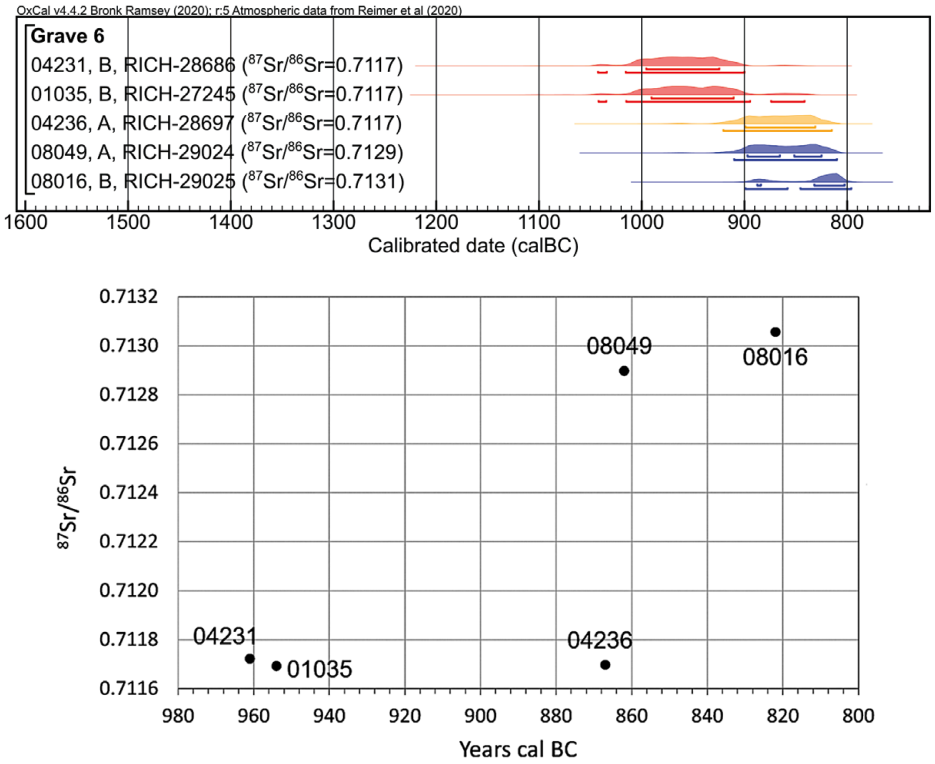


Fig. 5. Radiocarbon dates and strontium isotope ratios of five diaphysis fragments from Grave 6 of the Metal Age cremation cemetery of Herstal, Belgium, showing that the remains of at least three individuals are present in that grave. Top: OxCal plot showing the calibrated radiocarbon dates, each colour corresponding to a different individual, and the $^{87}Sr/^{86}Sr$ (modified after Sabaux *et al. 2021); bottom: scatterplot with $^{87}Sr/^{86}Sr$ versus medians of calibrated radiocarbon dates.*

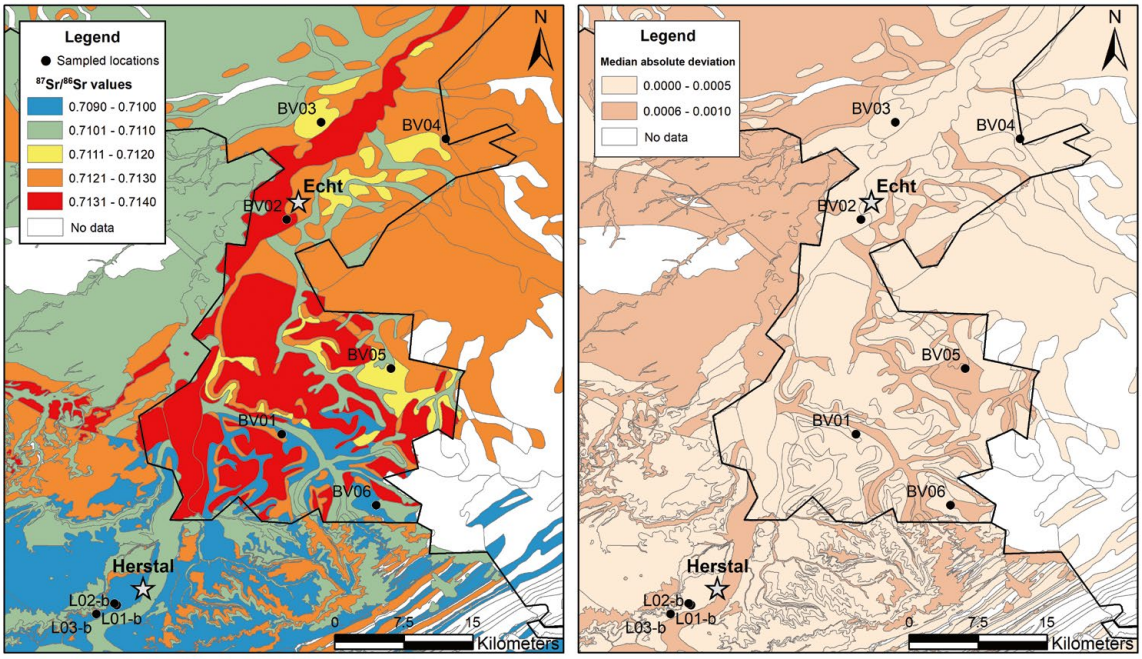


Fig. 6. Locations of Herstal and Echt (grey stars) and plant sampling locations (black dots) with information on the biologically available strontium; left: median values; right: median absolute deviation (MAD) (modified after Veselka *et al. 2021b).*

https://doi.org/10.2369/9783869354439.beyond-urnfields

(*c.* 800–500/450 BC) that a few cremation graves suggest the presence of people from a different region. The funerary practices reveal no differences within and between the urnfields, except that one of the cremations with a different origin was covered by a plate and the urn contained the fragments of three additional vessels that had been burned (De Mulder et al. 2021b).

Looking at the data from a diachronic point of view, a clear change in mobility and/or dietary patterns can be ascertained during the Roman Period (Fig. 7; Dalle et al. 2022). Indeed, increased mobility during the Roman Period was expected, but instead $^{87}Sr/^{86}Sr$ present the narrowest range in values compared to all other periods, close to 0.7092 that is the values of seawater and marine resources (Hess et al. 1986). At the same time, Roman individuals have the highest [Sr] compared to the other periods, which suggests an unprecedented increase in consumption of sea salt and marine resources (preservative, garum, salt, etc.). This highlights the need to contrast dietary and mobility information to fully interpret strontium isotope results (Dalle et al. 2022; 2023a). The $^{87}Sr/^{86}Sr$ and [Sr] data from the CRUMBEL project (see Snoeck et al. 2021; 2022, and references therein; Dalle et al. 2023b) are openly shared in the IsoArcH database (Salesse et al. 2018; Plomp et al. 2022), providing accessible and unrestricted access to the information.

Funerary practices

Cremation is a multifaceted mortuary practice involving various activities performed by the living towards the dead before, during, and after burning. However, limited information derived from pyre remains and cremation deposits hampers the reconstruction of how corpses were handled during this process. As part of the CRUMBEL project, an experimental pilot study was conducted to assess the feasibility of reconstructing the initial positioning of the body on or within the pyre, as well as to provide evidence of the presence of worn footwear. To achieve this, indoor and outdoor experimental burnings were performed using pig legs as proxies for human remains, followed by isotopic ($\delta^{13}C$, $\delta^{18}O$) and infrared (ATR-FTIR) analyses as these analytical tools have been shown to provide information about pyre conditions (Snoeck et al. 2014; 2016). The findings of these experiments reveal that both the positioning of the feet on or within the pyre and the presence of leather footwear can significantly influence the oxygen isotope ratios of bone apatite carbonates ($\delta^{18}O_{carb}$) and the cyana-

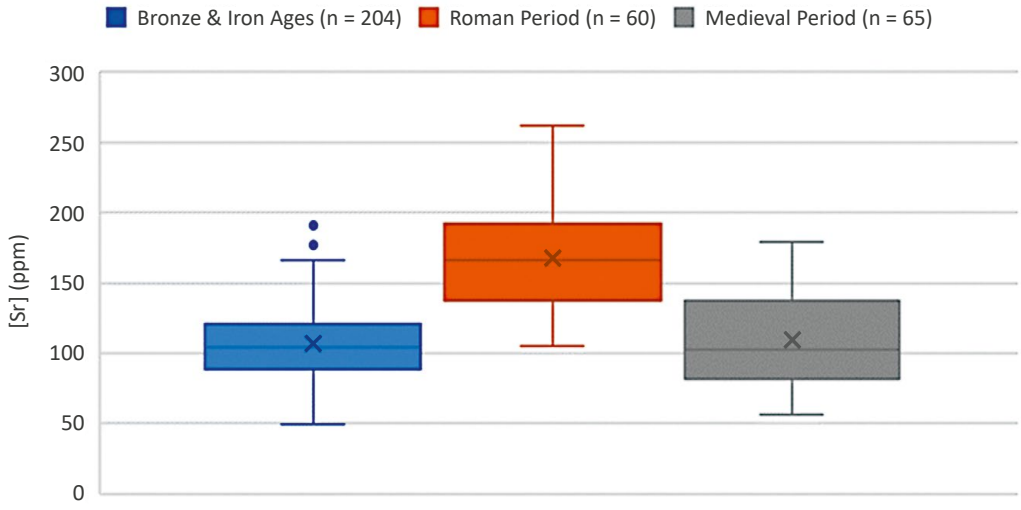


Fig. 7. Strontium concentrations ([Sr]) for 329 cremated individuals from different periods (data after Dalle et al. 2022; 2023a; Sabaux et al. 2021; Veselka et al. 2021c).

https://doi.org/10.2369/9783869354439.beyond-urnfields

mide content of calcined bone (CN/P) under specific circumstances. Closed shoes create a protective layer, delaying the burning of underlying pig tissues and intensifying the heat-shielding effect of soft tissues on the bone mineral fraction. Consequently, bioapatite bone carbonates interact with a relatively more ^{18}O-depleted atmosphere (attributed to lignin-derived oxygen rather than cellulose-derived oxygen), resulting in a more pronounced decrease in $\delta^{18}O_{carb}$ values when burning shoed feet compared to unshod feet. This shift can reach up to 2.5 ‰. Furthermore, the initial placement of the feet in the pyre exhibits a concomitant isotopic effect, leading to a top-to-bottom decrease difference of approximately 1.4 ‰ in $\delta^{18}O_{carb}$ values among shoed feet at different levels of deposition. Lastly, the presence of cyanamide (CN/P ≥ 0.02) that can be used as a proxy for oxygen available during cremation, appears to indicate the use of closed footwear, as such conditions create favourable circumstances for its incorporation into bone apatite (Salesse et al. 2021).

Furthermore, it has been demonstrated by Stamataki et al. (2021) that applying these methods (FTIR-ATR, carbon, and oxygen isotope analysis) on archaeological cremated human remains can provide important information regarding the variations in the way cremation was performed in different sites. The aim of this study was to assess the variability in cremation conditions (i.e. temperature, body positions, pyre structure, and location) among four sites dating to the Late Bronze Age/Early Iron Age (*c.* 1200–500/450 BC) located in two culturally distinct river basins (Scheldt and Meuse basins) in Belgium. The linear discriminant analyses (LDA) and the principal component analyses (PCA) of the infrared and isotope results clearly demonstrate that there is a statistically significant difference among the sites of the Scheldt and Meuse basins (Fig. 8; Stamataki et al. 2021). These differences indicate that the burning process was not homogeneous in the Belgian region, but it was correlated with the two cultural traditions observed in ceramics and bronze artefacts from the same period. The differences in cremation practices observed between the two basins could be linked to different pyre sizes and their location in the landscape (on top of a hill or in a valley), the amount and type of fuel used, the position of the body on the pyre, the temperature, etc. Finally, it seems that although cremation was the dominant funerary rite in Belgium during the Late Bronze Age/Early Iron Age, the location of Belgium at the crossroads between two cultural traditions (Atlantic and Continental) influenced the way cremation was performed. Other factors such as the wood availability in each region as well as the skills and/or the experience of the cremation operator could also affect the variation in pyre technology.

Conclusions and future perspectives

The CRUMBEL project aimed at gathering more information about the cremated individuals recovered in Belgium from archaeological contexts dating from the Neolithic to the Early Middle Ages by applying existing methods and testing new ones. A large radiocarbon dating campaign revealed important changes in funerary practices in the Bronze and Iron Ages and confirmed the almost absence of cremation burials pre-dating the Middle Bronze Age. The combined use of osteology, radiocarbon dating, and strontium isotope ratio further highlighted the complexity in Metal Ages cremation burial with the presence of bones belonging to up to three individuals in a single cremation burial. The intentionality (or not) of the presence of different individuals in a single burial requires further detailed research. The cremation practices differ between the Scheldt and the Meuse basins in Belgium, which seems to be linked to the different cultural groups settling these two basins. Finally, the transition from the Metal Ages to the Roman period appears to be linked to a drastic shift in food selection and procurement with a significant increase in salt consumption (preservative, garum, salt, etc.) in Roman times. Overall, the CRUMBEL project has shed new light on those individuals that were cremated in Belgium in the past, and more research will soon provide even more information

https://doi.org/10.2369/9783869354439.beyond-urnfields

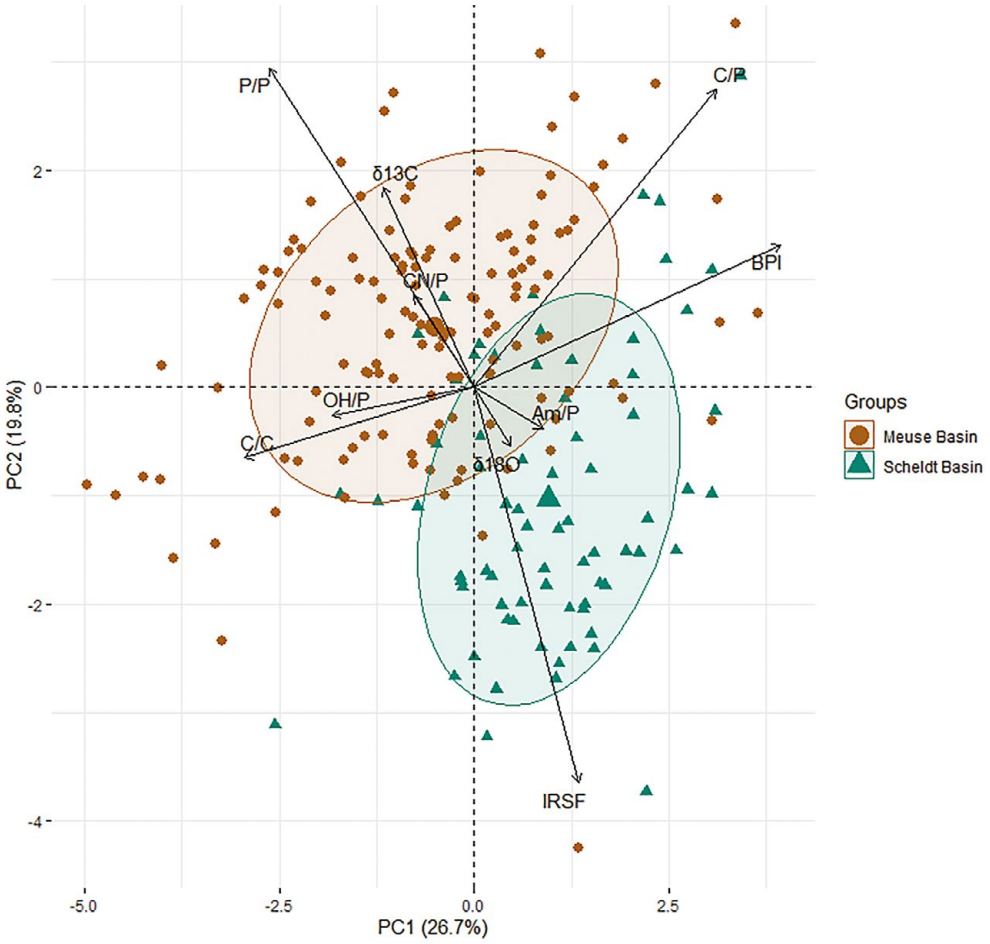


Fig. 8. Principal components analysis (PCA) results showing the differences between individuals cremated during the Bronze and Iron Ages in the Meuse (brown) and Scheldt (green) basins (modified after Stamataki *et al. 2021).*

and contrast between regions, countries and periods. Methods and approaches developed in the CRUMBEL project are therefore a first step to unravel the mysteries hidden within the cremated human remains, and in this way they set the path to follow, opening new research possibilities and being potentially extended to the study of many prehistoric and historic communities in Europe and abroad that practiced cremation.

References

Black/Scheuer 1996: S. M. Black/J. L. Scheuer, Age changes in the clavicle: From the early neonatal period to skeletal maturity. International Journal of Osteoarchaeology 6, 1996, 425–434.

Brooks/Suchey 1990: S. Brooks/J. M. Suchey, Skeletal age determination based on the os pubis: a comparison of the Acsádi-Nemeskéri and Suchey-Brooks methods. Human Evolution 5, 1990, 227–238.

Buckberry/Chamberlain 2002: J. L. Buckberry/A. T. Chamberlain, Age Estimation from the Auricular Surface of the Ilium: A Revised Method. American Journal of Physical Anthropology 119(3), 2002, 231–239.

Capuzzo et al. 2020: G. Capuzzo/C. Snoeck/M. Boudin/S. Dalle/R. Annaert/M. Hlad/I. Kontopoulos/C. Sabaux/K. Salesse/A. Sengeløv/E. Stamataki/B. Veselka/E. Warmenbol/G. De Mulder/D. Tys/M. Vercauteren, Cremation vs. inhumation: modeling cultural changes in funerary practices from the Mesolithic to the Middle Ages in Belgium using Kernel Density Analysis on ^{14}C data. Radiocarbon 62(2), 2020, 1809–1832.

Capuzzo et al. 2023: G. Capuzzo/G. De Mulder/C. Sabaux/S. Dalle/M. Boudin/R. Annaert/M. Hlad/K. Salesse/A. Sengeløv/E. Stamataki/B. Veselka/E. Warmenbol/C. Snoeck/M. Vercauteren, Final

https://doi.org/10.2369/9783869354439.beyond-urnfields

Neolithic and Bronze Age funerary practices and population dynamics in Belgium, the impact of radiocarbon dating cremated bones. Radiocarbon 65(1), 2023, 51–80.

Cavazzuti et al. 2019: C. Cavazzuti/B. Bresadola/C. D'Innocenzo/S. Interlando/A. Sperduti, Towards a new osteometric method for sexing ancient cremated human remains. Analysis of Late Bronze Age and Iron Age samples from Italy with gendered grave goods. PLOS ONE 14(1), 2019: https://doi.org/10.1371/journal.pone.0209423.

Dalle et al. 2022: S. Dalle/C. Snoeck/A. Sengeløv/K. Salesse/M. Hlad/R. Annaert/T. Boonants/M. Boudin/G. Capuzzo/C. T. Gerritzen/S. Goderis/C. Sabaux/E. Stamataki/M. Vercauteren/B. Veselka/E. Warmenbol/G. De Mulder, Strontium isotopes and concentrations in cremated bones suggest an increased salt consumption in Gallo-Roman diet. Nature, Scientific Reports 12, 2022: https://doi.org/10.1038/s41598-022-12880-4.

Dalle et al. 2023a: S. Dalle/G. Capuzzo/M. Hlad/B. Veselka/R. Annaert/M. Boudin/C. Sabaux/K. Salesse/A. Sengeløv/E. Stamataki/M. Vercauteren/E. Warmenbol/C. Snoeck/G. De Mulder, Hidden transitions. New insights into changing social dynamics between the Bronze and Iron Age in the cemetery of Destelbergen (Belgium). Journal of Archaeological Science: Reports 49, 2023: https://doi.org/10.1016/j.jasrep.2023.103979.

Dalle et al. 2023b: S. Dalle/C. Snoeck/A. Sengeløv/K. Salesse/M. Hlad/R. Annaert/T. Boonants/M. Boudin/G. Capuzzo/C. T. Gerritzen/S. Goderis/C. Sabaux/E. Stamataki/M. Vercauteren/B. Veselka/E. Warmenbol/G. De Mulder, 87Sr/86Sr and [Sr] data of cremated human individuals from the Bronze and Iron Age cemetery in Destelbergen (Belgium) [Data set]. IsoArcH 2023: https://doi.org/10.48530/isoarch.2023.006.

De Laet/Rogge 1972: S. De Laet/M. Rogge, Une tombe à incineration de la civilisation aux gobelets campaniformes trouvée à Kruishoutem (Flandre orientale). Helinium 12, 1972, 209–224.

De Mulder 2014: G. De Mulder, Les rites funéraires dans le nord du bassin de l'Escaut à l'âge du Bronze final et au premier âge du Fer. In: A. Cahen-Delhaye/G. De Mulder (dir.), Des espaces aux esprits. L'organisation de la mort aux âges des Métaux dans le nord-ouest de l'Europe. Etudes et Documents. Archéologie 32 (Namur 2014) 27–58.

De Mulder 2020: G. De Mulder, L'apparition des tombes plates à crémation à l'âge du Bronze en Belgique. Bulletin de l'Association pour la Promotion de la Recherche de l'Age du Bronze 18, 2020, 88–97.

De Mulder/Bourgeois 2014: G. De Mulder/I. Bourgeois, Le champ d'urnes de Kontich/Duffelsesteenweg (province d'Anvers, Belgique). In: A. Cahen-Delhaye/G. De Mulder (dir.), Des espaces aux esprits. L'organisation de la mort aux âges des Métaux dans le nord-ouest de l'Europe. Etudes et Documents. Archéologie 32 (Namur 2014) 75–81.

De Mulder et al. 2007: G. De Mulder/M. Van Strydonck/M. Boudin/W. Leclercq/N. Paridaens/E. Warmenbol, Re-evaluation of the Late Bronze Age and Early Iron Age chronology of the Western Belgian urnfields based on ^{14}C dating of cremated bones. Radiocarbon 49(2), 2007, 499–514.

De Mulder et al. 2017: G. De Mulder/M. Van Strydonck/M. Boudin/I. Bourgeois, Unraveling the occupation history of the cremation cemetery at Wijnegem/Blikstraat (Belgium). Radiocarbon 59(6), 2017, 1645–1656.

De Mulder et al. 2020: G. De Mulder/C. Snoeck/D. Tys/M. Vercauteren/M. Boudin/E. Warmenbol/G. Capuzzo/K. Salesse/C. Sabaux/S. Dalle/E. Stamataki/A. Sengeløv/M. Hlad/R. Annaert/B. Veselka/I. Kontopoulos, The Late Iron Age cemetery of Kemzeke/Kwakkel (prov. of East-Flanders, Belgium): first radiocarbon dates on cremated bone. Lunula. Archaeologia protohistorica XXVIII 2020,133–137.

De Mulder et al. 2021a: G. De Mulder/S. Dalle/C. Snoeck/D. Tys/M. Vercauteren/M. Boudin/E. Warmenbol/G. Capuzzo/K. Salesse/C. Sabaux/E Stamataki/A. Sengeløv/M. Hlad/R. Annaert/B. Veselka, Radiocarbon dating the urnfields at Sint-Gillis-Waas (prov. East-Flanders, Belgium). Lunula. Archaeologia protohistorica XXIX, 2021, 149–154.

De Mulder et al. 2021b: G. De Mulder/S. Dalle/C. Sabaux /B. Veselka/G. Capuzzo/A. Sengeløv/M. Hlad/E. Warmenbol/E Stamataki/M. Boudin/R. Annaert/K. Salesse/D. Tys/M. Vercauteren/C. Snoeck, Een nieuwe kijk op de populatie van beide urnenvelden te Velzeke. Strontiumanalyse als de indicator van mobiliteit tijdens de late bronstijd en de vroege ijzertijd. Handelingen van het Zottegems Genootschap voor Geschiedenis en Oudheidkunde XX/1, 2021, 349–356.

De Reu et al. 2012: J. De Reu/G. De Mulder/M. Van Strydonck/M. Boudin/J. Bourgeois, ^{14}C dates and spatial statistics: Modeling intrasite spatial dynamics of urnfield cemeteries in Belgium using case study of Destelbergen cemetery. Radiocarbon 54, 2012, 635–648.

Delaruelle et al. 2012: S. Delaruelle/B. De Smaele/C. Thijs/S. Verdegem/S. Scheltjens/J. Van Doninck, Een meerfasig grafmonument aan de Hueve Akkers in Oud-Turnhout (prov. Antwerpen, België). Lunula. Archaeologia protohistorica XX, 2012, 35–40.

Demirjian et al. 1973: A. Demirjian/H. Goldstein/J. M. Tanner, A new system of dental age assessment. Human Biology 45(2), 1973, 211–227.

D'Ortenzio et al. 2016: L. D'Ortenzio/I. Ribot/E. Raguin/A. Schattmann/B. Bertrand/B. Kahlon/M. B. Brickley, The rachitic tooth: a histological examination. Journal of Archaeological Science 74, 2016, 152–163. https://doi.org10.1016/j.jas.2016.06.006.

Draily et al. 2021: C. Draily/R. Annaert/M. Boudin/G. Capuzzo/S. Dalle/G. De Mulder/F. Hanut/M. Hlad/K. Salesse/A. Sengeløv/E. Stamataki/D. Tys/M. Vercauteren/B. Veselka/O. Vrielynck/ E. Warmenbol/C. Snoeck/C. Sabaux, Recent data on Early Iron Age cremations in the northern group of Ardennes burial mounds: Hastape and Fosse del Haye (Gouvy, prov. of Luxembourg, Belgium). Lunula. Archaeologia protohistorica XXIX, 2021, 165–168.

Falys/Lewis 2011: C. G. Falys/M. E. Lewis, Proposing a way forward: a review of standardisation in the use of age categories and ageing techniques in osteological analysis (2004–2009). International Journal of Osteoarchaeology 21(6), 2011, 704–716.

Falys/Prangle 2015: C. G. Falys/D. Prangle, Estimating age of mature adults from the degeneration of the

https://doi.org/10.2369/9783869354439.beyond-urnfields

sternal end of the clavicle. American Journal of Physical Anthropology 156(2), 2015, 203–214.

Godinho et al. 2019: R. M. Godinho/I. Oliveira-Santos/A. Maurício/A. Valera/D. Gonçalves, Is enamel the only reliable hard tissue for sex metric estimation of burned skeletal remains in biological anthropology? Journal of Archaeological Science: Reports 26, 2019. https://doi.org/10.1016/j.jasrep.2019.101876.

Gonçalves et al. 2011: D. Gonçalves/V. Campanacho/H. F. Cardoso, Reliability of the lateral angle of the internal auditory canal for sex determination of subadult skeletal remains. Journal of Forensic and Legal Medicine 18(3), 2001, 121–124.

Gonçalves et al. 2013: D. Gonçalves/T. J. U.Thompson/E. Cunha, Osteometric sex determination of burned human skeletal remains. Journal of Forensic and Legal Medicine 20(7), 2013, 906–911.

Gouveia et al. 2017: M. F. Gouveia/I. O. Santos/A. L. Santos/D. Gonçalves, Sample-specific odontometric sex estimation: A method with potential application to burned remains. Science & Justice 57(4), 2017, 262–269.

Harbeck et al. 2011: M. Harbeck/R. Schleuder/J. Schneider/I. Wiechmann/W. W. Schmahl/G. Grupe, Research potential and limitations of trace analyses of cremated remains. Forensic Science International 204(1–3), 2011, 191–200.

Hess et al. 1986: J. Hess/M. L. Bender/J. G. Schilling, Evolution of the ratio of strontium-87 to strontium-86 in seawater from Cretaceous to present. Science 231(4741), 1986, 979–984.

Hlad et al. 2021: M. Hlad/B. Veselka/D. Wolfe Steadman/B. Herregods/M. Elskens/R. Annaert/M. Boudin/G. Capuzzo/S. Dalle/G. De Mulder/C. Sabaux/K. Salesse/A. Sengeløv/E. Stamataki/M. Vercauteren/E. Warmenbol/D. Tys/C. Snoeck, Revisiting metric sex estimation of burnt human remains via supervised learning using a reference collection of modern identified cremated individuals (Knoxville, USA). American Journal of Physical Anthropology 175(4), 2021. https://doi.org:10.1002/ajpa.24270.

Holck 1986: P. Holck, Cremated bones: a medical-anthropological study of an archaeological material on cremation burials. Universitetet i Oslo, Antropologiske skrifter I (Oslo 1986).

Işcan et al. 1984: M. Y. Işcan/S. R. Loth/R. K. Wright, Metamorphosis at the sternal rib: A new method to estimate age at death in males. American Journal of Physical Anthropology 65, 1984, 147–156.

Işcan et al. 1985: M. Y. Işcan/S. R. Loth/R. K. Wright, Age estimation from the rib by phase analysis: White females. Journal of Forensic Sciences 30(3), 1985, 853–863.

Lanting/Brindley 1998: J. N. Lanting/A. L. Brindley, Dating cremated bone: the dawn of a new era. Journal of Irish Archaeology 9, 1998, 1–7.

Lanting et al. 2001: J. N. Lanting/A. T. Aerts-Bijma/J. Van der Plicht, Dating of cremated bones. Radiocarbon 43(2A), 2001, 49–54.

Liversidge et al. 1998: H. Liversidge/B. Herdeg/F. Rösing, Dental age estimation of non-adults. A review of methods and principles. In: K. Alt/F. Rösing/M. Teschler-Nicola (eds.), Dental Anthropology. Fundamentals, Limits and Prospects (Wien, New York 1998) 419–442.

Lockau et al. 2019: L. Lockau/S. Atkinson/S. Mays/T. Prowse/M. George/A. Sperduti/L. Bondioli/C. Wood/M. Ledger/M. B. Brickley, Vitamin D deficiency and the ancient city: Skeletal evidence across the life course from the Roman period site of Isola Sacra, Italy. Journal of Anthropological Archaeology 55, 2019. https://doi.org/10.1016/j.jaa.2019.101069.

Masotti et al. 2013: S. Masotti/E. Succi-Leonelli/E. Gualdi-Russo, Cremated human remains: is measurement of the lateral angle of the meatus acusticus internus a reliable method of sex determination? International Journal of Legal Medicine 127, 2013, 1039–1044.

Mays/Brickley 2018: S. Mays/M. B. Brickley, Vitamin D deficiency in bioarchaeology and beyond: The study of rickets and osteomalacia in the past. International Journal of Paleopathology 23, 2018. https://doi.org/10.1016/j.ijpp.2018.05.004.

Meylemans et al. 2022: E. Meylemans/R. Annaert/G. Capuzzo/K. Deforce/L. Linders/J. Van Doninck/B. Veselka/C. Sabaux/S. Dalle/M. Boudin/M. Hlad/K. Salesse/A. Sengeløv/E. Stamataki/E. Warmenbol/M. Vercauteren/G. De Mulder/C. Snoeck, Uit de kluiten gewassen: een toevalsvondst van ijzertijdurnen in een grafheuvelcomplex te Postel (Mol, prov. Antwerpen, België). Lunula. Archaeologia protohistorica XXX, 2022, 67–71.

Moorrees et al. 1963: C. F. Moorrees/E. A. Fanning/E. E. Hunt Jr., Age variation of formation stages for ten permanent teeth. Journal of Dental Research 42(6), 1963, 1490–1502.

Plomp et al. 2022: E. Plomp/C. Stantis/H. F. James/C. Cheung/C. Snoeck/L. Kootker/A. Kharobi/C. Borges/D. K. Moreiras Reynaga/Ł. Pospieszny/F. Fulminante/R. Stevens/A. K. Alaica/A. Becker/X. De Rochefort/K. Salesse, The IsoArcH initiative: Working towards an open and collaborative isotope data culture in bioarchaeology. Data in Brief 45, 2022. https://doi.org/10.1016/j.dib.2022.108595.

Polet/Cauwe 2007: C. Polet/N. Cauwe, Étude paléopathologique des squelettes de l'Abbri des Autours (Province de Namur, Belgique). Anthropologica et Praehistorica 118, 2007, 127–160.

Reimer et al. 2020: P. Reimer/W. E. N. Austin/E. Bard/A. Bayliss/P. G. Blackwell/C. Bronk Ramsey/M. Butzin/H. Cheng/R. L. Edwards/M. Friedrich/P. M. Grootes/T. P. Guilderson/I. Hajdas/T. J. Heaton/H. G. Hogg/K. A. Hughen/B. Kromer/S. W. Manning/R. Muscheler/J. G. Palmer/C. Pearson/J. van der Plicht/R. W. Reimer/D. A. Richards/E. M. Scott/J. R. Southon/C. S. M. Turney/L. Wacker/F. Adolphi/U. Büntgen/M. Capano/S. M. Fahrni/A. Fogtmann-Schulz/R. Friedrich/P. Köhler/S. Kudsk/F. Miyake/J. Olsen/F. Reinig/M. Sakamoto/A. Sookdeo/S. Talamo, The IntCal20 Northern Hemisphere Radiocarbon Age Calibration Curve (0–55 cal kBP). Radiocarbon 62(4), 2020, 725–757.

https://doi.org/10.2369/9783869354439.beyond-urnfields

Sabaux et al. 2021: C. Sabaux/B. Veselka/G. Capuzzo/C. Snoeck/A. Sengeløv/M. Hlad/E. Warmenbol/E. Stamataki/M. Boudin/R. Annaert/S. Dalle/K. Salesse/V. Debaille/D. Tys/M. Vercauteren/G. De Mulder, Multi-proxy analyses reveal regional cremation practices and social status at the Late Bronze Age site of Herstal, Belgium. Journal of Archaeological Science 132, 2021. https://doi.org/10.1016/j.jas.2021.105437.

Sabaux et al. submitted: C. Sabaux/C. Snoeck/G. Capuzzo/B. Veselka/S. Dalle/E. Warmenbol/E. Stamataki/M. Hlad/A. Sengeløv/V. Debaille/M. Boudin/K. Salesse/R. Annaert/M. Vercauteren/G. De Mulder, Novel multidisciplinary approach detects multiple individuals within the same Metal Age cremation graves. Radiocarbon.

Salesse et al. 2018: K. Salesse/R. Fernandes/X. De Rochefort/J. Brůžek/D. Castex/É. Dufour, IsoArcH.eu: an open-access and collaborative isotope database for bioarchaeological samples from the Graeco-Roman world and its margins. Journal of Archaeological Science: Reports 19, 2018. https://doi.org/10.1016/j.jasrep.2017.07.030.

Salesse et al. 2021: K. Salesse/E. Stamataki/I. Kontopoulos/G. Verly/R. Annaert/M. Boudin/G. Capuzzo/P. Claeys/S. Dalle/M. Hlad/G. De Mulder/C. Sabaux/A. Sengeløv/B. Veselka/E. Warmenbol/M. Vercauteren/C. Snoeck, These boots are made for burnin': inferring the position of the corpse and the presence of leather footwears during cremation through isotope (δ13C, δ18O) and infrared (FTIR) analyses of experimentally burnt skeletal remains. PLOS ONE 16(10), 2021. https://doi.org/10.1371/journal.pone.0257199.

Sergant et al. 2009: J. Sergant/I. Bourgeois/M. Boudin/M. Van Strydonck/J. Bastiaens/N. Van Liefferinge, Een finaal-neolithisch (?) graf te Ranst-Zevenbergen (Antwerpen, B). Notae Praehistoricae 29, 2009, 149–155.

Silva 2015: F. Silva, The funerary practice of cremation at Augusta Emerita (Mérida, Spain) during high empire: Contributions from the anthropological analysis of burned human bone. In: T. Thompson (ed.), The Archaeology of Cremation (Oxford 2015) 123–150.

Snoeck et al. 2014: C. Snoeck/J. A. Lee-Thorp/R. J. Schulting, From bone to ash: Compositional and structural studies of burned bone. Palaeogeography, Palaeoclimatology, Palaeoecology 416, 2014, 55–68.

Snoeck et al. 2015: C. Snoeck/R. J. Schulting/J. A. Lee-Thorp/J. De Jong/W. Debouge/ N. Mattielli, Calcined bone provides a reliable substrate for strontium isotope ratios as shown by an enrichment experiment. Rapid Communications in Mass Spectrometry 29, 2015, 107–114.

Snoeck et al. 2016: C. Snoeck/R. J. Schulting/J. A. Lee-Thorp/M. Lebon/A. Zazzo, Impact of heating conditions on the carbon and oxygen isotope composition of calcined bone. Journal of Archaeological Science 65, 2016, 32–43.

Snoeck et al. 2021: C. Snoeck/C. Cheung/J. I. Griffith/H. F. James/K. Salesse, Strontium isotope analyses of archaeological cremated remains – new data and perspectives [Data set]. IsoArcH 2021. https://doi.org/10.48530/isoarch.2021.016.

Snoeck et al. 2022: C. Snoeck/C. Cheung/J. I. Griffith/H. F. James/K. Salesse, Strontium isotope analyses of archaeological cremated remains – new data and perspectives. Data in Brief 42, 2022. https://doi.org/10.1016/j.dib.2022.108115.

Stamataki et al. 2021: E. Stamataki/I. Kontopoulos/K. Salesse/R. McMillan/B. Veselka/C. Sabaux/R. Annaert/M. Boudin/G. Capuzzo/P. Claeys/S. Dalle/M. Hlad/A. Sengeløv/M. Vercauteren/E. Warmenbol/D. Tys/G. De Mulder/C. Snoeck, Is it hot enough? A multi-proxy approach shows variations in cremation conditions during the Metal Ages in Belgium. Journal of Archaeological Science 136, 2021. https://doi.org/10.1016/j.jas2021.105509.

Thompson et al. 2009: T. J. U. Thompson/M. Gauthier/M. Islam, The application of a new method of Fourier Transform Infrared Spectroscopy to the analysis of burned bone. Journal of Archaeological Science 36, 2009, 910–914.

Ulguim 2015: P. Ulguim, Analysing cremated human remains from the southern Brazilian highlands: Interpreting archaeological evidence of funerary practices at mound and enclosure complexes in the Pelotas River valley. In: T. Thompson (ed.), The Archaeology of Cremation (Oxford 2015) 173–212).

Van Liefferinge 2009: N. Van Liefferinge, Resultaten van het archeologisch onderzoek op de verkaveling 'Creuteldonck' te Ranst-Zevenbergen. AS-Rapportage 13–2008 (Mechelen 2009).

Veselka/Lemmers 2014: B. Veselka/S. A. M. Lemmers, Deliberate selective deposition of Iron Age cremations from Oosterhout (prov. Noord-Brabant, the Netherlands): a 'pars pro toto' burial ritual. LUNULA Archaeologia protohistorica XXII, 2014, 151–158.

Veselka/Snoeck 2021: B. Veselka/C. Snoeck, Interglobular dentine attributed to vitamin D deficiency visible in cremated human teeth. Scientific Reports 11, 2021. https://doi.org/10.1038/s41598-021-00380-w.

Veselka et al. 2015: B. Veselka/M. L. P. Hoogland/A. L. Waters-Rist, Rural rickets: vitamin D deficiency in a post-Medieval farming community from the Netherlands. International Journal of Osteoarchaeology 25, 2015, 665–675. https://doi.org/10.1002/oa.2329.

Veselka et al. 2018: B. Veselka/A. E. Van der Merwe/M. L. P. Hoogland/A. L. Waters-Rist, Gender-related vitamin D deficiency in a Dutch 19th century farming community. International Journal of Paleopathology 23, 2018, 69–75. https://doi.org/10.1016/j.ijpp.2017.11.001.

Veselka et al. 2019: B. Veselka/M. B. Brickley/L. L. D'Ortenzion/B. Kahlon/M. L. P. Hoogland/A. L. Waters-Rist, Micro-CT assessment of dental mineralization defects indicative of vitamin D deficiency in two 17th–19th century Dutch communities. American Journal of Biological Anthropology169, 2019, 122–131. https://doi.org/10.1002/ajpa.23819.

Veselka et al. 2021a: B. Veselka/M. Hlad/D. Wolfe Steadman/H. Annaert/M. Boudin/G. Capuzzo/S. Dalle/I. Kontopoulos/G. De Mulder/C. Sabaux/K. Salesse/A. Sengeløv/E. Stamataki/M. Vercauteren/D. Tys/C. Snoeck, Estimating age-at-death in burnt adult human remains using the Falys-Prangle method. American Journal of Biological Anthropology 175, 2021, 128–136. https://doi.org/10.1002/ajpa.2410.

Veselka et al. 2021b: B. Veselka/M. B. Brickley/A. L. Waters-Rist, A joint medico-historical and paleopatho-

https://doi.org/10.2369/9783869354439.beyond-urnfields

logical perspective on vitamin D deficiency prevalence in post-Medieval Netherlands. International Journal of Paleopathology 32, 2021, 41–49.

Veselka et al. 2021c: B. Veselka/G. Capuzzo/R. Annaert/N. Mattielli/M. Boudin/S. Dalle/M. Hlad/C. Sabaux/K. Salesse/A. Sengeløv/E. Stamataki/D. Tys/M. Vercauteren/E. Warmenbol/G. De Mulder/C. Snoeck, Divergence, diet, and disease: the identification of group identity, landscape use, health, and mobility in the fifth- to sixth-century AD burial community of Echt, the Netherlands. Archaeological and Anthropological Sciences 13, 2021. https://doi.org/10.1007/s12520-021-1348-7.

Wahl 1996: J. Wahl, Erfahrungen zur metrischen Geschlechtsdiagnose bei Leichenbränden. Homo – Journal of Comparative Human Biology 47, 1996, 339–359.

Christophe Snoeck (corresponding author)
Vrije Universiteit Brussel
Archaeology, Environmental Changes & Geo-Chemistry
AMGC-WE-VUB
Brussels
Belgium
Christophe.Snoeck@vub.be

Giacomo Capuzzo
Research Unit: Anthropology and Human Genetics
Department of Biology of Organisms and Ecology
Université Libre de Bruxelles
Brussels
Belgium

Department of Humanities
University of Trento
Trento
Italy

Barbara Veselka
Vrije Universiteit Brussel
Archaeology, Environmental Changes & Geo-Chemistry
AMGC-WE-VUB
Brussels
Belgium

Kevin Salesse
Department of Anthropology
Masaryk University
Brno
Czech Republic

https://doi.org/10.2369/9783869354439.beyond-urnfields

Ioannis Kontopoulos
Department of Geosciences
University of Tübingen
Tübingen
Germany

Rica Annaert
Flemish Heritage Agency
Brussels
Belgium

Sarah Dalle
Vrije Universiteit Brussel
Archaeology, Environmental Changes & Geo-Chemistry
AMGC-WE-VUB
Brussels
Belgium

Department of Archaeology
Ghent University
Ghent
Belgium

Marta Hlad
Vrije Universiteit Brussel
Archaeology, Environmental Changes & Geo-Chemistry
AMGC-WE-VUB
Brussels
Belgium

Research Unit: Anthropology and Human Genetics
Department of Biology of Organisms and Ecology
Université Libre de Bruxelles
Brussels
Belgium

Charlotte Sabaux
Vrije Universiteit Brussel
Archaeology, Environmental Changes & Geo-Chemistry
AMGC-WE-VUB
Brussels
Belgium

Research Unit: Anthropology and Human Genetics
Department of Biology of Organisms and Ecology
Université Libre de Bruxelles
Brussels
Belgium

https://doi.org/10.2369/9783869354439.beyond-urnfields

Department of Archaeology
Ghent University
Ghent
Belgium

Amanda Sengeløv
Research Unit: Anthropology and Human Genetics
Department of Biology of Organisms and Ecology
Université Libre de Bruxelles
Brussels
Belgium

Department of Archaeology
Ghent University
Ghent
Belgium

Elisavet Stamataki
Vrije Universiteit Brussel
Archaeology, Environmental Changes & Geo-Chemistry
AMGC-WE-VUB
Brussels
Belgium

Research Unit: Anthropology and Human Genetics
Department of Biology of Organisms and Ecology
Université Libre de Bruxelles
Brussels
Belgium

Mathieu Boudin
Royal Institute for Cultural Heritage
Brussels
Belgium

Eugène Warmenbol
Centre de Recherches en Archéologie et Patrimoine
Department of History, Arts, and Archaeology
Université Libre de Bruxelles
Brussels
Belgium

Martine Vercauteren
Research Unit: Anthropology and Human Genetics
Department of Biology of Organisms and Ecology
Université Libre de Bruxelles
Brussels
Belgium

https://doi.org/10.2369/9783869354439.beyond-urnfields

Guy De Mulder
Department of Archaeology
Ghent University
Ghent
Belgium

https://doi.org/10.2369/9783869354439.beyond-urnfields

https://doi.org/10.2369/9783869354439.beyond-urnfields

This volume presents the results of an international network project on Late Bronze Age and Early Iron Age urnfields from northwest Europe.
Individual chapters present the archaeological material and its research history within a local, regional, or supra-regional context, demonstrating the wide range of nuances contained by the funerary phenomenon. The volume provides the first comprehensive overview of the urnfield funerary phenomenon in northwest Europe and forms the foundation for future research across national and disciplinary boundaries.
This volume successfully demonstrates that the inconspicuous urnfields of northwest Europe are not as anonymous as previously assumed but hold valuable information about life and death in the Late Bronze Age and Early Iron Age.

9 783869 354439
https://doi.org/10.2369/9783869354439.beyond-urnfields
www.verlag-ludwig.de